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USSR Report

AGRICULTURE

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15 November 1985

**USSR REPORT
AGRICULTURE**

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MAJOR CROP PROGRESS AND WEATHER REPORTING

IZVESTIYA REVIEWS LATE SEPTEMBER HARVEST SCENE

PM031425 Moscow IZVESTIYA in Russian 3 Oct 85 Morning Edition p 2

[O. Pavlov agricultural review: "Concluding Days of the Harvest"]

[Text] According to the USSR Central Statistical Administration, by Monday, 30 September, grain and pulse crops (excluding corn) had been cut in the country on 106.8 million hectares and threshed on 105.4 million hectares--99 percent of the amount cut. Pulse crops have been harvested on 6 million hectares. Rice has been threshed on 275,000 hectares. Corn for grain has been harvested on 1.7 million hectares. Sunflowers have been taken from 2 million hectares--[figure indistinct] percent. Sugar beets have been lifted on 1.4 million hectares--41 percent. Fiber flax has been pulled on 852,000 hectares--84 percent. Potatoes have been harvested on 2.2 million hectares--77 percent--and vegetables on 763,000 hectares--66 percent.

Some 74.2 million metric tons of hay--95 percent--74.5 million metric tons of haylage, 215 million metric tons of silage, 84.8 million metric tons of straw, 8.8 million metric tons of feed root crops, and 6.5 million metric tons of grass meal have been procured.

Winter crops have been sown on 31.9 million hectares--79 percent--and fall plowing has been carried out on 55.8 million hectares--51 percent.

When the agricultural year is drawing to a close, we like to know what it has brought us. For the countryside and the associated sectors of the agroindustrial complex determine to a decisive degree the level of the public consumption fund.

So how, then, is the year shaping up? It is too early to reply, and yet we could certainly point to the organization of labor collectives and their persistence in overcoming the complexities in wintering livestock and in efficiently carrying out spring field work and the harvest in the main regions. Despite the unfavorable weather at the start of haymaking, more hay and other kinds of coarse and succulent feed has been procured than by the same time last year. And the quality is higher. Intensive technologies have been introduced over considerable areas. There has been a good increase in the harvest wherever the matter has been organized correctly. There has been an appreciable increase in the number of collectives in both arable

farming and livestock raising which have assimilated the collective contract and improved their results.

The concluding days of the grain harvest have been arrived at in the east of the country. Krasnoyarsk Kray and Irkutsk Oblast farmers have increased their work pace appreciably. There grain crops have been threshed on 83 and 87 percent respectively of the sown area. The final spurt remains to be made, as the saying goes. Likewise, incidentally, for the grain growers of North Kazakhstan. The weather there is good, which makes it possible to reckon on completing the harvest in the next few days.

Altay Kray farmers have quite little left to harvest--approximately 200,000 hectares. Some 2 million [metric tons of] grain has been sold to the state. Procurements are continuing. More than 100,000 metric tons of grain is arriving every day at the threshing floors and grain-reception centers. The chief link of the harvest conveyor belt is now the "threshing floor-elevator" link. Its successful operation is promoted by the truck drivers' reliably organized labor. In Kosikhinskiy Rayon, for example, the agricultural freight traffic control center has worked out the optimum transportation routes.

Omsk Oblast kolkhozes and sovkhozes have practically finished harvesting. But Novosibirsk Oblast farms still have to thresh one-tenth of the crops.

During the week grain and pulse crops were cut in the country on 3.2 million hectares and threshed on 5.4 million hectares. As stated above in the Central Statistical Administration report, in all, since the beginning of harvesting, grain crops have been cut on 106.8 million hectares and threshed on 105.4 million hectares. Last year's level has been overtaken. Last year the results by 30 September were 102.9 and 100.8 million hectares respectively.

Grain purchases have been organized well in many regions. More strong, durum, and valuable wheat, rye, millet, and buckwheat has been delivered to the state granaries than by the same time a year ago.

Interest in the cultivation of strong and durum wheats is also shown by farms in a number of regions which not so long ago did not devote much attention to this. For example, kolkhozes and sovkhozes in Azerbaijan, which began winter sowing on the last day of September, are reckoning on sowing strong and durum strains on two-thirds of the area of grain crops. Contract links are carrying out the sowing.

A good rhythm marks the harvesting of corn for grain. During the week cobs were harvested on 589,000 hectares. This is 116,000 hectares more than during the previous 7 days.

Work is in full swing in the fields occupied by industrial crops. So far somewhat less has been harvested here than last year. This applies, above all, to sugar beets, potatoes, and sunflowers. Although in the last week the pace of harvesting of these crops, particularly sunflowers, was good.

As USSR Ministry of Agriculture specialists point out, in the last week kolkhozes and sovkhozes in all the cotton-growing republics worked well. However, cotton growers still have a lot to do.

In short, local soviets and agroindustrial association, kolkhoz, and sovkhoz specialists must now devote as much attention as possible to grain procurements and the harvesting of industrial crops. The fall is leaving less and less time to end the harvest.

CSO: 1824/044

MAJOR CROP PROGRESS AND WEATHER REPORTING

CSA REPORT ROUNDS UP HARVEST STATUS

LD251918 Moscow Domestic Service in Russian 1500 GMT 25 Sep 85

[Commentary by Aleksandr Ruvinskiy]

[Text] The main work on the grain fields these days is taking place in the eastern regions of the country. And it must be said that on the whole the harvest is drawing to a close here in favorable conditions. There is little rain and even this is not falling everywhere. In the past week alone machine operators of the Altay have threshed grain on over 1,300,000 hectares which is one-third of the whole of the kray's grain area. Kustanay and Kokchetav Oblasts cleared grain from almost 1 million hectares. And such oblasts as Tselinograd, Chelyabinsk, Omsk and Turgay have virtually completed the harvest. According to USSR Central Statistical Administration data received in the editorial offices today the total area from which bread grain has been cut in the country has reached 103,600,000 hectares. If one compares the statistical summary data of the past few years one can say that the harvesting rates are quite high.

Whereas in the east almost everywhere harvesting is going ahead rapidly and smoothly in the European part of the country there are unjustified delays in the grain area. Farms of Kalinin, Kostroma, Yaroslavl and certain other central Russian oblasts still have uncut grain standing in their fields. This is also delaying the preparation of the fields for the next harvest.

Mass procurement of grain is continuing. A considerable amount of strong wheats, the most valuable types, is being sold to the state by farms of Armenia, Bashkiria, Kabardo-Balkaria, Saratov, Kuybyshev and a number of other oblasts. Procurement of rye, millet, buckwheat and grain corn is going well.

At the same time as grain, the country is harvesting many other crops. Thus, over one-third of the sunflower crop has been threshed even though the ripening of this crop is being delayed. The harvesting of flax fiber has been completed in the Ukraine. Threshing of grain corn is nearing completion in collective and state farms of Uzbekistan, Tajikistan and Turkmenia. A considerable amount of work still remains to be done on the potato fields and vegetable plantations.

The foundations are being laid for the next harvest. Winter crops have been sown on almost 29 million hectares. The plan for sowing using intensive technology has been fulfilled by farms of Chuvashia, Udmurtia, Orenburg, Orel and Penza Oblasts.

MAJOR CROP PROGRESS AND WEATHER REPORTING

CSA NOTES RSFSR HARVEST, PLANTING SHORTCOMINGS

LD040945 Moscow Domestic Service in Russian 1400 GMT 2 Oct 85

[From the "On the Fields of Russia" feature by correspondent Aleksandr Ruvinskiy]

[Text] Machinery is now leaving the grain fields in the republic's eastern areas. In the past few days, Omsk farmers have completed threshing grain crops. Good quality wheat covers a large area. Farms in Kemerovo and Tyumen Oblasts and the Altay have nearly completed their harvests by the end of September, according to an RSFSR CSA report, grain in the republic had been threshed on 94 percent of the total area sown.

Throughout the harvest, rates have been high in the Urals and Siberia, and they are high now. Specialists are somewhat concerned, however, at the situation in the European part of the republic, in particular in the Chernozem Zone. Ninety-two percent of the grain harvest has been gathered in there but in the past week work to complete the harvest has moved very slowly. In Smolensk Oblast, for example, another 30 percent of crops remain to be harvested, in Ivanovo and Yaroslavl 20 percent, and in Kostroma Oblast 25 percent.

In the southern parts of the republic, mass work is under way on feed corn plantations. Threshing yields are high in Kabardino-Balkariya. Sunflower harvesting rates have increased over recent days, but unfortunately many farms have not yet started threshing the crop. There are many such collective and state farms in Volgograd, Saratov, and Orenburg Oblasts, and in Bashkiriya. This inevitably arouses concern.

Winter sowing is now continuing in the northern Caucasus, the lower Volga and Kaliningrad Oblast, where 80 percent of the winter crop has been sown. Sowing plans have not been fulfilled in certain of the republic's central oblasts. This will increase the amount of work in the spring, but autumn plowing is also going slowly here. In Bryansk, Kalinin, and Smolensk Oblasts less than one-third of the spring sowing area has been plowed.

CSO: 1824/044

MAJOR CROP PROGRESS AND WEATHER REPORTING

INTENSIVE TECHNOLOGY CULTIVATION INCREASES

LD041016 Moscow Domestic Service in Russian 0500 GMT 3 Oct 85

[Text] Winter crop sowing is now under way in the country's southernmost areas. According to USSR Central Statistical Administration data, crops have been sown on almost 32 million hectares, which is 79 percent of the plan. Compared with last year, the scale of cultivation of winter crops with intensive technology has grown significantly. Autumn plowing is now under way on collective and state farms for next year's harvest; half the total of this work has been done. Plowing is being carried out on a daily average of over 1.5 million hectares. This work has been organized precisely on collective and state farms in Tataria, Chuvashia, and Orenburg and Sverdlovsk Oblasts. But in Pskov and Smolensk Oblasts there is a real threat that the autumn plowing plan will not be fulfilled; part of the work will have to be carried out in the spring, which will complicate spring sowing.

Today Azerbaijan's agricultural workers began picking cotton on account of their socialist pledges. The tasks for the last year of the 5-year plan have been fulfilled in an extremely short space of time. Over 700,000 tons of raw material have been dispatched to the republic's processing enterprises in a month. This is the first time the cotton growers have reached such harvest rates. To a great extent this is a result of the efficient use of machinery. The largest yield in many years has been grown by agricultural workers in Barda; they have over 100,000 tons of cotton on their account.

A great labor feat has been achieved by feed procurement workers in Dagestan--the year's plan for storing hay, haylage, vitamin meal, and straw. Over 1.2 million tons of all types of coarse feed have been laid in for wintering cattle. This is over 100,000 tons more than last year, in spite of the rural workers having to work in extremely unfavorable climatic conditions this year. The transition to team contracting by many feed procurement workers' collectives favored the job's success.

CSO: 1824/044

MAJOR CROP PROGRESS AND WEATHER REPORTING

PROGRESS MADE IN FEED PRODUCTION

LD040503 Moscow Domestic Service in Russian 1200 GMT 3 Oct 85

[Text] In the country's kolkhozes and sovkhozes additions continue to be made to the stores of feed for public sector animal husbandry. At the microphone is our commentator, Aleksandr Ruvinskiy:

[Ruvinskiy] The plan for laying in coarse feed has been 99 percent fulfilled on the country's farms. This is a good figure. The rate which has been achieved allows more feed to be stored this year than in any preceding year. This promises a weighty increase in animal husbandry products, especially meat and milk.

Among the work now being done for feed production, I first of all would like to mention silaging. The plan for preparing silage has been 83 percent fulfilled. And, in such republics as Latvia, Lithuania, and Estonia, more silage has been prepared than was planned. But much work still lies ahead in Georgia and Azerbaijan. Here, corn intended for silage still stands uncut on a considerable area.

There has been a considerable improvement in the quality of the prepared silage this year. More use is being made of various mineral additives which raise its value and promote the preservation of the feed's most valuable nutrients. Many farms are extending the preparation of combined silage. This type of feed has fully justified itself, showing a high level of effectiveness last year. It permits savings in concentrated feeds, especially in grain for pig rearing. Now, much of this feed has been prepared in Bashkiria, Lipetsk, Volgograd, and Ulyanovsk Oblasts and throughout the Ukraine. But it is still possible to make considerable increases in the supplies of such feed in the time that remains.

Harvesting of grain crops has been completed on the majority of the country's farms, but straw has, as yet, not been gathered in from far from every field. This is delaying the plowing of fallows.

The time has arrived for the mass lifting of feed root crops. A pretty good harvest of them has been growing even though they are ripening rather later than usual. This valuable milk-producing feed is now being most successfully gathered in Tajikistan and in the RSFSR. But Belorussia, Moldavia, and Uzbekistan are only just beginning to lift roots from the first hectares.

CSO: 1824/044

MAJOR CROP PROGRESS AND WEATHER REPORTING

PAPER REVIEWS HARVEST, SOWING PROGRESS

PM071434 Moscow SEL'SKAYA ZHIZN' in Russian 3 Oct 85 p 1

[N. Osychkin "Agricultural Review": "In the Fall Fields"]

[Excerpts] Not everywhere are the farmers getting the right weather. It is very important now to make each hour count, to harvest and store everything that has been grown, and satisfy more fully the state's food and raw material requirements. This attitude is characteristic at the moment of farms in eastern areas where the harvesting of grain and other crops is continuing. Harvest work has finished in Karasukskiy, Kupinskiy, Baganskiy, and Novosibirskiy Rayons in Novosibirsk Oblast. They are near to fulfilling grain procurement plans. More than 3,000 metric tons of grain are arriving daily at reception centers from Dovolenskiy Rayon farms. Machine operators in Krasnoyarsk Kray have threshed more than 1 million hectares of grain.

In the RSFSR as a whole more than 63 million hectares of grain had been cut by the beginning of October and 62.1 million hectares had been threshed, which is 94 percent of the sown area. Harvesting is nearly over in Orenburg, Kurgan, Perm, and Chelyabinsk Oblasts and in the Bashkir and Udmurt ASSR's. The last few tens of thousands of hectares are being threshed in Omsk Oblast, Altay Kray, and Kemerovo Oblast. At the same time one-fifth of the crops remain to be harvested in the northwest, central, and east Siberia economic regions.

Farmers in Kazakhstan have harvested over 23 million hectares. Farmers in the virgin land oblasts are concentrating on threshing all the swaths in the next few days and getting all the grain into state and farm stores. Over 4,000 heavy trucks trains [as received] are involved in delivery operations.

Corn harvesting is now at its height. This work must be substantially speeded up, especially in the Ukraine, the North Caucasus, and the Central Chernozem Zone, where not enough effort is being made on the corn plantations. Farms are continuing to harvest hulled and pulse crops and to dispatch the grain to the state. The threshing of rice on irrigated land is too slow. Some 275,000 hectares have been harvested--a smaller area than last year. The urgent work has to be carried out on nearly one-half of the crop in the Kuban, Astrakhan Oblast, and the Maritime Kray--the RSFSR's chief rice-growing areas.

Some 2 million hectares of sunflowers have been harvested--half of the sown area. The work is nearly complete in Moldavia; one-third of the heads have been threshed in Voronezh Oblast and one-fifth in Rostov Oblast, while in the Volga area the units are only just starting work. Farm leaders here are making a poor job of supervising the units' work; they are not allocating enough trucks for harvest deliveries and are failing to clean and dry the oilseed promptly.

The cotton harvest is in full swing. Some 4 million metric tons of cotton have already been delivered to the state. More than half of this has come from Uzbekistan. Farms in the republic are daily sending 150,000 metric tons of valuable raw material to reception centers. Some 852,000 hectares of long-stemmed flax have been pulled--84 percent of the crop. Processing enterprises must increase reception of flax from farms.

An even greater volume of work has to be done on beet plantations. So far 1.4 million hectares of beets have been lifted. This is 41 percent of the crop. The changeable weather is delaying the harvest work. That is why it is so important now to ensure very efficient organization of the entire combine-truck-plant process, prevent delays between lifting and removal of the roots, which have increased in a number of places, and ensure that processing enterprises are kept busy and are producing sugar at a steady rate.

Farmers are busy with their vegetables. Some 2.3 million hectares of potatoes have been lifted--77 percent of the crop; 763,000 hectares of vegetables have been harvested--66 percent of the crop.

Winter crops have been sown on 32 million hectares. This is somewhat fewer than by the same time last year. Intensive techniques have been used to sow nearly 12 million hectares of wheat. In many places the tending of crops has started in order to ensure that the plants winter well. Fall plowing has been carried out on 56 million hectares--more than half of the planned area. The work rate is lower than last year. It has become particularly low in recent days in the Central Chernozem, Ural, and Volga-Vyatka regions.

CSO: 1824/044

MAJOR CROP PROGRESS AND WEATHER REPORTING

MOSCOW RADIO REPORTS AGRICULTURAL DEVELOPMENTS FOR 30 SEP-2 OCT

LD030322 [Editorial Report] The following is a compilation of reports on agricultural developments in the USSR carried by Moscow Domestic Service in Russian on 30 September-2 October. Times of broadcasts are given in parentheses at the end of each item.

30 September

Cotton-picking is in full swing in Uzbekistan. Good results are being shown by farmers of the Tashkent Oblast. However, our correspondent notes, their neighbors, farmers of the Syrdarya Oblast, have still got a significant part of their machinery standing idle; therefore the rate of harvesting here is the lowest. (0001)

Last combines are leaving fields of the Pavlodar Oblast, where grain crops have been harvested and threshed on the area of almost 2 million hectares. (0300)

Azerbaijan's bread-grain growers today started sowing winter crops. Over two-thirds of the entire sowing area will be taken up by seeds of hard and strong wheat varieties. (0900)

Since the beginning of the harvest season 500,000 tons of raw cotton have been delivered to the procurement points in Turkmenistan. (1200)

Winter sowing has been completed in Belorussia on 1,500,000 hectares; 1 million of this to be cultivated using intensive technology. Potatoes have been lifted to date from 60 percent of the land under that crop in Belorussia. The state has been sold 750,000 tons. (1430)

1 October

Mordovia--1,485,000 tons of silos have been laid in. (0130)

Kurgan Oblast--harvest is nearing completion, with over 1 million tons of grain sold to the state. (0304)

Uzbekistan--2nd million tons of cotton to be procured today, which is 300,000 tons more than at end of September 1984. (0304)

Rostov Oblast--fall sowing is complete. It occupies over 2 million hectares. (0430)

Moldavia--harvesting of sunflowers is complete. (0430)

The harvest is drawing to a close on the country's fields. It was reported from Kazakhstan today that grain crops had been gathered in from 96 percent of the entire field. The farms of Tselinograd and Pavlodar Oblasts have coped completely with the tasks set; mechanizers of Kustanay and North Kazakhstan Oblasts are close to doing this. The harvest has entered its final stage in the Altay. Grain crops have been reaped on 4 million hectares. On 90 percent of these areas, they have been threshed. (1100)

Massive harvesting of soya beans has started in the Amur River Valley today. (1300)

2 October

Half the planned area--900,000 hectares--has been plowed for autumn sowing in Omsk Oblast. (0900)

Cotton-picking has opened in Chimkent Oblast. To date over 18,000 tons have been delivered. (0900)

Over 100,000 hectares have been plowed in Kirghizia. Half the area has been completed in Issyk-Kul Oblast. Widespread sowing of winter cereals continues. (0900)

CSO: 1824/044

MAJOR CROP PROGRESS AND WEATHER REPORTING

BRIEFS

FALL, WINTER CROP SOWING--The country's kolkhozes and sovkhozes are continuing mass autumn sowing. Winter crops are being sown in the Moldavian, South Ukrainian, Lower Volga, North Caucasus, Transcaucasian and Central Asian republic. The USSR (CSD) reports that by the beginning of this week winter crops had been sown on 28.6 million hectares, which is 61 percent of the plan: On nearly 11 million hectares they have been sown using intensive technology, which guarantees a considerable increase in yield under any weather conditions. Recently, plowing has increased: On average it is being carried out on 1.5 million hectares a day. Farms of Moscow Oblast have been some of the first to cope with this work, while Chuvash and Tatar farms are close to finishing. Preparation of soil for spring crops is, however, going slowly in Pskov and Smolensk Oblasts and Tuva ASSR. [Text] [Moscow Domestic Service in Russian 0600 GMT 26 Sep 85 LD]

EAST HARVEST NEARLY COMPLETE--Siberia--The harvest in the country's eastern areas is nearly complete. By the beginning of October, grain crops have been gathered in western Siberia on almost 10 million hectares, which is 94 percent of all the sown area. Three-quarters of the grain has been threshed in eastern Siberia. Last week alone, according to RSFSR CSA data, the harvest in Siberia was brought in on over 3 million hectares. Such high rates allow all jobs to be completed in the very near future. Nearer job completion than others at the moment are farms in Kemerovo and Chita Oblasts. In Tuva harvesting is being held up somewhat. Farms in western Siberia are also now bringing in crops such as flax, potatoes, and sugar beets, and, at the same time, preparations for the next harvest are underway. [Text] [Moscow Domestic Service in Russian 0100 GMT 2 Oct 85 LD]

NATIONAL HARVEST CONTINUES--Collective and state farms of eastern regions of the country are completing the grain harvest. The rates of threshing have increased notably in the last few days. In the last week alone, the harvest has been gathered in the Urals, Siberia, and Kazakhstan from 5 million hectares, while cutting has been carried out on 106 million hectares as a whole in the country. Threshing of swathes is also being carried out after only a short interval. This was reported by the USSR CSA. [Text] [Moscow Domestic Service in Russian 2004 GMT 2 Oct 85 LD]

CSO: 1824/944

LIVESTOCK FEED PROCUREMENT

ROLE OF FEED ROOT CROPS IN VARIOUS REGIONS

PM081007 Moscow SELSKAYA ZHIZN in Russian 4 Oct 85 p 1

[Livestock expert M. Glinka's "Agricultural Review": "Root Crops and Equipment"]

[Excerpt] Recently feed root crops, studiously ignored a few years ago, not even featured in the dairy herd's diet, have been playing an increasing part in livestock units' forage stocks. In the first year of the 5-year plan less than 35 million metric tons of this feed was consumed by livestock; last year the figure was 46.1 million metric tons. And the quantity of feed root crops and melon crops used at Ukrainian livestock units and complexes rose during that period from 15.8 to 20.2 million metric tons; in Belorussia from 2.8 to 3.6 million metric tons, and in Azerbaijan from 136,000 to 259,000 metric tons. Livestock units in Latvia have started using considerably more feed root crops. They constitute a considerable part of the diet of dairy cattle at livestock units in Leningrad and Moscow oblasts and the high milk yields are to be large extent due to this. In Krasnodar Kray feed beets are also fed to hogs. At the well-known "Ventsy-Zarya" pedigree stock farm, for example, sows have been receiving about 17 kg of root crops. This has not only made it possible to reduce the dose of concentrates to 1.5 kg, but has also markedly improved the sows' fertility and made for more vigorous piglets.

So the interest in the valuable forage crops, above all the most productive of them, feed beet, is perfectly understandable. The point is not just that feed root crops possess valuable nutritional properties and help to provide a balanced diet in terms of sugar, which has been a serious problem of late. The main point is that they provide the largest quantity of nutrients per hectare and make it possible to obtain more products from the same patch of land. The farms of the Moldavian scientific research institute of field crops, for example, grow 1,800-2,000 quintals of feed beets per hectare. The yields are just as high on a number of kolkhozes and sovkhozes in southern oblasts of the Ukraine. Consequently, here they are harvesting more than 30 metric tons of feed units per hectare! You are not likely to find another forage crop as productive as that. And by introducing this succulent feed into the diet we are contributing to the more efficient utilization of our chief resource--land.

So far we have talked about the consumption of succulent feed. But what about the replenishment of stocks of this feed this year? This is shown by the following figures (percentage of the plan):

RSFSR--24; Ukraine--14; Belorussia--6; Uzbekistan--5; Kazakhstan--15; Georgia--24; Azerbaijan--12; Lithuania--5; Moldavia--7; Latvia--13; Kirghizia--19; Tajikistan--29; Armenia--7; Turkmenia--9, and Estonia--5.

In the RSFSR the highest feed root crop harvest rates are in Komi ASSR and Arkhangelsk, Kirov, Begorod, Kuybyshev, Kurgan, Sverdlovsk, Omsk, Tomsk, and Irkutsk oblasts where procurement plans have been fulfilled by 30-52 percent. This work is slowest in Stavropol and Khabarovsk krays, the Karelian, Chuvash, and Udmurt ASSR's, and Pskov, Smolensk, Voronezh, Volgorad, Novosibirsk, and Chita oblasts.

It is too soon to draw any final conclusions--the root crop harvest is at its height at the moment. But there are grounds for anxiety. Procurement of this type of feed is perhaps the most labor intensive of all the forage crop operations. And any sudden change in the weather, which nature can sometimes be so ready to inflict, can leave the harvest stranded in the fields.

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LIVESTOCK

SCIENTIFIC CATTLE BREEDING IN ESTONIA REVIEWED

Tallinn SOVETSKAYA ESTONIYA in Russian 14 Aug 85 p 2

[Article by E. Valdman, VASKhNIL [All-Union Academy of Agricultural Sciences imeni V. I. Lenin] academician and director of the Estonian Scientific-Research Institute of Livestock Raising and Veterinary Science imeni A. Melder [NIIZhV] under the rubric "Recipients of the Estonian SSR State Prize": "From the Laboratory to the Farm"]

[Text] On the eve of the 45th anniversary of Soviet Estonia a resolution on the awarding of the 1985 State Prize was published. The prize was awarded to a collective of authors, scientists of the Estonian Scientific-Research Institute of Livestock Raising and Veterinary Science imeni A. Melder, for the development and introduction of a progressive system of breeding work with cattle. Today we are yielding the floor to one of the recipients of this prize.

The strengthening of the union of science and practical experience and the efficient introduction of scientific and production achievements is the constant concern of scientists of the Estonian NIIZhV. This is attested to by the growth in the volume of proposals being introduced by the institute. During the last 2 years this has included 95 elaborations. Every ruble invested by us into science is repaid tenfold. Here we are striving to have all recommendations made by scientists become accessible to all republic enterprises. How this is being achieved can be seen in examining the management of breeding operations involving cattle.

In 1984 in the republic average milk production per cow equalled 3,939 kilograms; the butterfat content in procured milk was also highest--3.75 percent. On industrial farms, where half of the republic's dairy herd is concentrated, average milk yield equalled 3,792 kilograms. These indicators are the result of joint efforts of numerous production and scientific collectives which are part of the republic's agro-industrial complex.

Estonian enterprises maintain pedigree cattle exclusively. Thanks to long-term and purposeful breeding-pedigree work breeds have been developed that are suitable for local natural-economic conditions with a comparatively high milk productivity and with sufficiently good fattening and meat qualities. Our Red

and Black-Spotted breeds of cattle are valued in other union republics and oblasts of our country as well.

Growth in average milk yield of cows occurred under conditions of a complete transition to machine and twofold milking. Fattening and meat qualities of young bulls enable us to achieve an average of 900 grams of weight gain daily during semi-intensive fattening; feed expenditures per kilogram of weight gain equal 7.0-7.5 feed units. Thanks to this we produce beef without mass raising of beef cattle breeds.

In the republic, an important role in improving cattle breeds is played by the Estonian NIIZhV and its breeding center as well as by its fattening department, laboratory of milk analysis, computer center and of course by specialists and livestock farmers of experimental enterprises. Nine experimental enterprises are maintaining over 20,000 head. Veterinarians, zootechnologists and breeders of these enterprises are rendering aid in carrying out breeding work in our entire republic. Their work is directed and controlled by the department of reproductive biology, the workers of which are not only involved in science but also influenced by practical needs; they also train specialists for enterprises.

From one year to the next breeding work has been expanding and becoming more thorough not only in large enterprises but in the individual sector as well. This matter is slow but labor is repaid with interest.

In 1982/1983 a new system was introduced for evaluating bulls according to their progeny; the basis for selecting cows includes data on productivity control. Monthly milk sampling includes a determination of both butterfat and protein content. This is being done in our institute's milk analysis laboratory using automatic analyzers. The presence of somatic cells--an indicator of the cow's health--is also determined. A method of early diagnosis of disease is being introduced.

A special department was created within the institute in 1977 in order to introduce account-keeping of pedigree cattle with the help of computers in the republic as a whole. New accounting programs for cows and young cattle were developed and experimentally approved.

A fully-mechanized system of zootechnical and breeding accounting has been in the process of being introduced in the republic since 1982. This system frees breeders from labor-intensive mechanical work and leaves more time for work directly with animals. The use of computers enables us to receive more many-sided and complete information.

Scientists, together with practical workers, have developed a comprehensive plan of breeding-pedigree work with Estonian cattle breeds for the period 1980-1990. The primary method for improving Estonian breeds involves pure breeding. Within its framework there is a utilization of cattle of parental breeds, thanks to which we avoid excessive kinship with scant local breeds; the genofund is enriched. This achieves accelerated results in increasing the productivity of breeds.

To improve Estonian Black-Spotted cattle the Dutch Black-Spotted breed is still used most frequently, and the Danish, Swedish, German, British and recently--the Holstein-Friesian breeds have been used to a lesser degree. During the 11th and 12th five-year plans this work will be continued. The goal is to develop a new type of Estonian Black-Spotted breed characterized by an especially high level of milk productivity. In this case it is essential to retain the relatively high butterfat content of milk that is characteristic of this breed.

Red Danish and Angeln cattle are being used to improve the Red Estonian breed. Butterfat and protein content in milk as well as milk yield have increased as a result. We intend to continue this work in the future.

Our institute has begun research on using a new biotechnical method of reproduction--embryonic transplant. The institute's workers have already obtained their first six calves. Results of experiments provide the basis for supposing that in the near future this effective method will become part of the practice of breeding work.

The progressive organization of breeding work and the close interrelationship between science and practice are the prerequisites for fulfilling the goals of increasing the productivity of cattle as planned for the 11th and 12th five-year plans.

8228
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LIVESTOCK

CATTLE RAISING DEFICIENCIES NOTED; INTENSIFICATION PROMOTED

Moscow SELSKAYA ZHIZN in Russian 20 Aug 85 p 1

[Editorial article: "Reserves on Meat Farms"]

[Text] The livestock farmers of Cherkassy Oblast have developed and are implementing a comprehensive program of intensifying beef production. Here the branch's feed base has been strengthened, precise intra-branch specialization in raising and fattening calves has been organized and intensive methods are being used everywhere. The oblast's enterprises send cattle to slaughter with an average weight of 433 kilograms.

There are examples of this type of assiduous approach to meat production in many republics, krays and oblasts. Intensive fattening of cattle and hogs on an industrial basis has been organized well in the industrial complexes of Moldavia, Krasnodar Kray and Vologda, Gorkiy, Leningrad, Moscow, Penza, Kiev, Sumi and Brest oblasts. The kolkhozes and sovkhozes of Lithuania, Latvia, Estonia and Belorussia are utilizing the capacities of regular farms with skill. In the country as a whole during the first 6 months the sale of livestock and poultry increased by 4 percent as compared with the same period last year. However, this is not enough to satisfy rapidly-growing demand for meat and meat products. It is essential to at least double the growth pace of these types of products.

There are considerable serious shortcomings involving the raising and fattening of cattle, hogs and sheep. Many enterprises employ extensive production methods and increase the delivery weight of animals by means of lengthening the fattening period. In Chita Oblast this year average daily weight gain of cattle comprised only 162 grams. Fattening indicators remain extremely low in Kalmyk, Checheno-Ingush and Maritime krays and in Astrakhan, Saratov and Vitebsk oblasts. Hogs are being fattened poorly in the enterprises of Karelia, Stavropol Kray and Bryansk, Orlov, Kursk and Mogilev oblasts. As a result the fattening schedule is lengthened, there is a sharp increase in the expenditure of forage per unit weight gain, the cost of production increases and meat production is transformed from a profitable to an unprofitable branch. Thus, in Rostov Oblast in the course of 33-40 months of feeding and fattening the weight of cattle increased by only 330-360 kilograms and forage outlays per animal increased to 5 tons of feed units. Fattening of cattle takes 2.5-3 years in the Turkmen SSR and in Nikolayev and

Ryazan oblasts. Hogs are kept over a year too long in many oblasts of the Ukraine, especially in Kirovograd and Poltava oblasts. The USSR Ministry of Agriculture, VASKhNIL [All-Union Academy of Agricultural Sciences imeni V. I. Lenin], and local party, soviet and economic organs are not demonstrating the necessary persistence in introducing effective methods for raising and fattening cattle and is treating the directors and specialists of enterprises of those enterprises which produce meat on an extensive basis without the necessary responsibility.

There are still frequent cases in which low-weight cattle in a low nutritional state is sent to processing enterprises. Especially large numbers of low-weight animals are arriving at meat combines from the kolkhozes and sovkhozes of Georgia, the Kirghiz SSR, Dagestan and Donetsk, Kalinin, Karaganda and Pskov oblasts. This year there was a decrease in the weight of cattle going to slaughter from Uzbekistan, Kazakhstan, the Udmurt ASSR, the Chuvash ASSR, Khabarovsk Kray and Ivanovo, Kemerovo, Kirov and Sverdlovsk oblasts. We know what a great loss this incurs as regards the supply of meat products to the population as well as to enterprises themselves. It is essential to examine the situation involving meat production in every republic, rayon, kolkhoz, sovkhoz and interfarm complex and to take the necessary measures to eliminate shortcomings.

The most important of such measures includes strengthening the feed base, increasing the level and improving the full-value of feeding animals at all stages of raising and fattening. It is intensive raising and fattening that allow us not only to increase the delivery weight of cattle and to raise the quality of meat produced but also to significantly decrease expenditures of feed, labor and resources per quintal of production. For example, at the Floreshtskoye Interfarm Enterprise of Moldavia during the first 6 months of the current year average daily weight gain increased to 872 grams and 2,907 bulls with an average weight of 584 kilograms were sent to slaughter. As a result, the plan for the sale of meat was fulfilled by 170 percent here. In the republic as a whole the 6-month plan for the procurement of livestock and poultry was overfulfilled as well. It is essential to more actively assimilate intensive production methods in all regions. Improving the meat productivity of animals and the sale of high-weight animals--today this is the main path for increasing meat production.

Very effective here is the extensive utilization of the achievements of breeding work and the development of specialized meat livestock raising. As we know, the dairy herd has been stabilized in the country; it is planned to increase milk production by means of rapidly increasing milk yield per cow. But this does not mean that we must stop increasing the number of cows in herds. It's just that the size of beef and not dairy herds should be increased. As the experience of leading enterprises in the RSFSR, the Ukraine, Belorussia and Kazakhstan has shown, the development of meat livestock raising as a specialized branch will enable us to produce beef of a higher quality with fewer expenditures of labor and resources.

Unfortunately, in all of these republics the number of animals of specialized meat breeds is not growing, and it is even decreasing in many enterprises. A fallacious tendency has developed to juxtapose meat livestock raising with

dairy farming and to decrease the number of beef cattle under this pretext. This is the way the number of beef cattle decreased in Kurgan Oblast and the way this important branch was almost totally eliminated in Mari ASSR and Ryazan and Gorkiy oblasts. Meanwhile it has been proven that specialized meat livestock raising can be advantageously developed not only in the steppe zone but in regions of intensive farming as well.

An increase in the production and sale to the state of meat is one of the most responsible tasks of livestock raising. It is essential to achieve an overall transition of meat livestock raising to intensive methods.

8228

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AGRO-ECONOMICS AND ORGANIZATION

GSSR CC FIRST SECRETARY ON PARTY ROLE IN GEORGIAN APK

Moscow KADRY SELSKOGO KHOZYAYSTVA in Russian No 6, Jul-Aug 85 pp 13-19

[Article by D. Patiashvili, first secretary of the Central Committee of the Georgian CP: "Party Management of the Republic's Agro-Industrial Complex"]

[Text] At the April Plenum of the CPSU Central Committee it was pointed out that the land should have a single manager. Georgia's party organization has accumulated positive experience in this regard. The article published below discusses this.

[Text] Preparations for the regular 27th CPSU Congress represent an important stage in the life of our party. As usual, during such periods we try to evaluate public phenomena and to determine the best ways to implement planned goals realistically and in a Leninist manner.

At the April 1985 Plenum of the CPSU Central Committee it was noted that at the present time an economic and social program, which will be presented at its 27th congress, is being carefully developed. At the same time, it has been emphasized that there are urgent tasks which require special attention. This refers first and foremost to the implementation of the Food Program, which the party feels is the central problem both economically and politically.

What does this mean to us, communists-directors, who are involved directly in the implementation of this program? The development of an agro-industrial complex and the solution of the food problem under contemporary conditions has become that social phenomenon which touches on the interests of every individual and of all the Soviet people. This places a great responsibility on us for every step we take on the path toward our goal, for every decision that we make along the way.

Actually, during recent years, as noted at the April 1985 central committee plenum, positive changes have occurred in agriculture. But we must go further.

Kolkhozes, sovkhozes and processing enterprises, having united their efforts, could utilize their great reserves more fully in order to significantly

increase the production of food items. For this reason, further improvements are needed in the management of the agro-industrial complex. The land must have a single manager. "It is the material and production source and foundation of socialism," wrote V. I. Lenin, "that requires an unconditional and strict unity of will to manage the joint efforts of hundreds, thousands and tens of thousands of people. Technically, economically and historically this necessity is apparent; everyone who has thought about socialism has always recognized this as a condition," (Complete Works. Vol 36, p 200).

The objective conditions for managing the agro-industrial complex as a unified whole have become ripe and now it is necessary to take the step that will enable us to concentrate the management of the entire food industry in one pair of hands--this is how the question is being put by the party's central committee.

The realistic nature of this requirement, which arose from life itself and which has been recognized everywhere, is also confirmed by all of the experience related to restructuring the management of agricultural production in our republic.

Georgia's party organization is greeting the regular CPSU congress with some experience under its belt concerning the solution to a number of urgent problems related to improving the management mechanism of the APK [Agro-industrial complex]. In our opinion, a fundamentally new approach to economic planning and management has been found. We are referring to the unification of three important links within the republic's agro-industrial complex: 1) agriculture, 2) water resources management and reclamation and 3) material-technical supply and equipment repair.

In solving this problem our conviction grew that field workers, reclamation workers and machine operators, placed in a position of closer economic interrelations and working side by side on the same land, would doubtless find a common language and would do everything possible to achieve the best end results. It was toward this type of approach to the task at hand that all of our party and management cadres were oriented. Practical experience has shown that, having created a republic state committee on agricultural production, we achieved a great deal--we expanded the rights of agro-industrial associations, increased their responsibility for the end results of work, and created stable prerequisites for beginning the 12th Five-Year Plan with a well-adjusted management mechanism that would enable us to more fully utilize the potential of our economy.

The tasks involved in implementing the Food Program do not give us time for vacillating or for interrupting our work. The fact is that, as V. I. Lenin taught, we must know "how to manage, how to correctly distribute people, how to avoid minor conflicts in order to avoid interrupting state management work" (Complete Works, Vol 45, p 107). This is a principally important political pronouncement. Reorganizing management while continuing operations and distributing people correctly while doing this--this is the Leninist wisdom that is difficult to learn but that must be followed faithfully in work with cadres. We can say that by following this principle we were able to create a mechanism that in and of itself inspires managers to concern themselves with

the results of production and to be responsible for the actual situation in general.

The development of the committee enabled us to concentrate in a single pair of hands the organization of agricultural production, its servicing and building, and agricultural science, thereby decreasing the number of structural subdivisions by 36 units.

On the basis of improving the management structure in the center as well as locally, we were able to reduce the size of the management apparatus by over 20 percent, and expenditures for its upkeep--by a sum of about 4 million rubles.

Over 700 persons now work in the central apparatus for agricultural production. Matters did not deteriorate, but instead actually improved, as a result of decreasing the number of structural subdivisions and workers.

Let us look at a fundamental question of the party's economic policy such as the acceleration of scientific-technical progress. At a recent meeting of the CPSU Central Committee, which discussed this problem, attention was given to the serious work being done to improve the administrative and management system. It was emphasized that if new economic and organizational conditions are not created it is not possible to truly accelerate scientific-technical progress, and that this large-scale task gives rise to the necessity for thorough changes in party work. We became convinced of these conclusions in practice.

As long ago as 1982 a plenum of the central committee was held in Georgia, with the participation of the USSR Academy of Sciences and other central organizations, in order to examine the status of scientific and technical progress. At the plenum the subject under discussion was, first and foremost, party management of this most important matter. As a result of the discussion we developed a system for managing scientific-technical progress. Coordinating councils on science and scientific-technical progress have been formed in oblast, city and rayon party committees under the leadership of first secretaries, and branch secretaries and buro members of party committees are pursuing similar directions. In this way, the place of all links of party influence has been determined.

We should say a special word about the integration of agricultural science with production in our republic. All institutes and scientific subdivisions of the branch are now within the administration of the regional division of VASKhNIL [All-Union Academy of Agricultural Sciences imeni V. I. Lenin], which according to the principle of double subordination became part of the State Committee on Agricultural Production. Within this system an indoctrination center has been created, and in rayon agro-industrial associations--subdivisions on scientific-technical progress.

As a result of the measures that have been taken, plans using new techniques are being almost fully implemented in the republic now and economic effectiveness has grown. The management system that has been developed enables us to find forms of scientific and production integration that will

shorten the path from scientific development to introduction by a factor of 2-3.

In general, after the creation of the State Committee on Agricultural Production there was a significant improvement in work with cadres--it became more consistent and goal-oriented. At the present time the selection and assignment of management workers for the RAPO [Rayon Agro-Industrial Association], of kolkhoz chairmen, of sovkhoz directors, of directors for interfarm associations and of other workers is being carried out after a careful study of every candidacy and with a consideration of the opinions of all economic and party organs.

Prior to the creation of the committee, work with cadres was carried out by a single person in the RAPO as well as in the former rayon production associations of Gruzkomselkhoztekhnika [Georgian Committee of the Agricultural Equipment Association] and in the administrations of land reclamation and water resources management. Today a cadres department has been created and is functioning in all RAPO's. It consists of 3-4 persons who carry out work with cadres on a rayon scale according to the directions of all enterprises, organizations and enterprises. This link is closely tied with the organizations having a double subordination and it has the opportunity to work with them in a planned manner to select and distribute cadres.

The organizational strengthening and structural improvement of the RAPO and the expansion of its authority has made it possible to eliminate a number of duties from the republic nomenclature of the state committee and to include them in the RAPO nomenclature. We feel that this will facilitate further growth in the authority and responsibility of the rayon link.

Of course, this is not a complete list by far of the innovations that the committee is trying to use in its work. Not all problems are being solved in the best manner as yet. This is why an improvement in the style and methods of work remain one of our main goals.

Of course, the process of integration is proceeding with some problems; naturally, it is related to a great psychological break with many basic concepts concerning obligations and responsibilities. And now, on the threshold of the great work that is before us as concerns improving the country's agro-industrial complex, I would like to recall the idea of V. I. Lenin, who foresaw that "we will have to start from the beginning many times over in all areas of building, correcting that which is incomplete and selecting different approaches to the matter at hand" (Complete Works, Vol 43, p 231). As we well know, the goal of studying experience consists, in addition to other things, of decreasing to a minimum inexact operations and errors that are unavoidable in any great beginning.

Successes and failures, achievements and misses--everything that accompanies the formation of an agro-industrial complex in our republic, including last but not least the formation of its cadres--all of this will evidently help others to take the grain of efficiency from all of the experience accumulated by us and at the same time it will help them to avoid that which is inappropriate for their specific conditions.

What has been achieved primarily as a result of such an association? Right now there is a great deal of discussion about probably the biggest problem with the APK--the interdepartmental separateness of branches. But in our variant integration immediately transformed inter-departmental questions into intrabranch problems. We acquired the opportunity to efficiently solve many problems which previously required lengthy agreements. Do we have to mention that in agriculture it is efficiency that often decides the fate of the harvest?

An improvement in the management of economic building is integrally related to an improvement in the style and method of work of party committees and to a strengthening of order, organization and discipline in all links of the party and management apparatus. For this reason, the Central Committee of the Georgian CP is giving primary attention to cadres policies--to the selection, distribution and education of managers. We feel that this is the basic and decisive factor in increasing the effectiveness of APK operations at all levels, in the growth of production intensification and in the acceleration of scientific-technical progress.

The Coordinating Council of the Central Committee of the Georgian CP, headed by the first secretary of the central committee, has become the central link in the system of work with cadres. This council coordinates all work with cadres in the republic while developing the corresponding recommendations for the buro and secretariat of the Central Committee of the Georgian CP, the republic's council of ministers, individual ministries and departments and party committees.

Through its sections the Coordinating Council controls work with cadres and manages it in all spheres of life of the republic, from the training of workers of mass professions and the selection of directors to questions of manpower supplies for socio-economic development of regions and branches of the national economy.

In order to represent the nature of the activities of this council I will mention only a few problems it has examined during the last 2 years--the condition and measures for improving work related to the selection, distribution and education of APK cadres in the republic, the work of the Makharadzevskiy Rayon party committee with the rayon's APK cadres, and the work with cadres while introducing the brigade form of labor organization.

In the section of the Coordinating Council dealing with work with APK cadres, headed by the secretary of the central committee, questions that were examined included, for example, the course of fulfillment of resolutions of the CPSU Central Committee and USSR Council of Ministers concerning securing kolkhozes and sovkhozes with management cadres and specialists, increasing their role and responsibility in the development of agricultural production, continued improvements in the training of APK management cadres and specialists and the training of cadres of mass professions within the system of Gosproftekhobrazovaniye [State Vocational-Technical Education System] for the republic's APK. We plan to hear a report on the work of the Goriyskiy Rayon party committee with APK cadres under the new management conditions in order

to receive information on the training, distribution and consolidation of specialists with a higher and secondary specialized education within the republic's APK. In 15 section meetings during 1980-1984 over 30 cadre-related questions were examined.

Having begun reorganization, we directed the most intent attention at increasing the personal responsibility of directors of enterprises and of specialists for the situation in kolkhozes and sovkhozes. We came to the following agreement. No worker, no matter what post he occupies, can remain beyond the control of and the view of the local party organization. We must achieve the purity of party ranks and fight more decisively, as noted at the April Plenum of the CPSU Central Committee, for the honest and pure image of the party member. In response to this we have the reports of communists, with the confirmation of party characteristics, carried out in the republic. Over 28,000 communists have already undergone this unique attestation. During the evaluation of reports it became necessary to relieve a number of directors of their posts. For example, the directors of Shroshskiy and Khashmskiy grape sovkhozes were relieved of their duties.

The Central Committee of the Georgian CP is giving special attention to improving work with nomenclature cadres. This work is taking on more and more of a systematic nature and is being carried out in accordance with comprehensive long-term plans which encompass all aspects of the problem--an improvement in the forms and methods of selecting and distributing directors, a study of their characteristics, increasing their ideological-political level and competency and strengthening controls over their activities and over their responsibility for the situation that exists in their assigned sections.

All of the main nationalities living in our republic are represented widely and proportionally in the central committee's nomenclature. In the course of management this enables us to take national characteristics, interests and customs of all levels of the populations into account.

The "Order for Carrying Out Conferences, Internships and Training for Cadres of the Nomenclature of the Georgian CP Central Committee" was developed and confirmed in November 1982 by the buro of the central committee on the basis of amassed experience and the generalization of practice. The program that is being implemented in accordance with this order includes conferences within departments of the central committee and the confirmation of characteristics of every new worker; a 10-15 day internship in the central committee and republic organs immediately after hiring or appointment of a worker; 1 or 2 years of independent study following an individual program at the Center for Increasing Training of Party, Soviet and Economic Directors, which was specially created in the Georgian CP Central Committee; and reports on cadres in the central committee's buro or secretariat after a certain period of time.

What is the intent and significance of these forms of work with cadres? The purpose of the conference is, first and foremost, to determine the level of training of the candidate for the position and his appropriateness for the section for which he is being recommended. In other words, the conference facilitates proper selection and the avoidance of errors in this matter. At

the same time, this orients the comrade towards work in a new section and increases his sense of responsibility before the buro and secretariat of the central committee; it equips him with a precise work program for a long period of time.

Internship in departments of the central committee and republic organs and primary party committees immediately after hiring or appointment helps workers to efficiently learn the ropes and to acquire the knowledge that is needed at the first stage. Internship programs are developed with a consideration of the worker's level of training and of the specific features of the section to which he has been assigned. Since November 1982 over 120 persons have had internships according to the nomenclature of the department of agriculture and the food industry.

During party certification directors report at the buro and secretariat of the party committee on how they are taking into consideration the observations made in the course of confirmation of their characteristics. Evaluations and suggestions expressed during the certification procedure help comrades to further improve their style and method of work.

After a consideration of the results of the conference within departments of the central committee and of the results of the internship, a 1-2 year plan of individual study is created for every worker at the Center for Increasing Training. The main goal here is to help administrative cadres to increase their business and professional training. Such individual programs have been created for administrative cadres under the auspices of the division of agriculture and the food industry.

The central committee of the republic's communist party is taking practical measures to train agricultural cadres in economic methods of management. In this regard special significance was attached to the creation of the Center for Increasing Training of Party, Soviet and Economic Managers within the Central Committee of the Georgian CP, of the laboratory for coordinating management experiments in the republic, as well as of the sector on the introduction of achievements of social sciences into social practice and party-political work.

During the training of agricultural cadres in our center we try not to overload the curriculum with questions of a general nature that are not related to the specific goals of production intensification.

Over 500 experienced specialists and capable organizers have been directed directly into production from various spheres of management in order to improve the economies of lagging kolkhozes and sovkhozes. Thanks to this and to other measures kolkhozes and sovkhozes are now headed by professionally-trained people who skilfully manage labor collectives, who effectively utilize the existing material-technical base and the achievements of science and technology and who carry out extensive educational work.

In order to secure young specialists locally, agricultural organs have been given the order to rigorously utilize the measures foreseen by law to secure young people in the village, to demonstrate daily concern for the creation of

normal work and living conditions for them, and to widely utilize all forms of moral and material incentives.

But we see that all of this is insufficient, and we are placing great emphasis on educational work in higher educational institutions, where it is not being carried out on a high level by far and where it is not sequential or goal-oriented.

Since 1982 the rayon committee of the Georgian CP has been working actively to develop a reserve of management cadres for kolkhozes and sovkhozes. The reserve includes 2-3 candidates per position from among promising village workers who are characterized by the necessary political, business-like and moral qualities and by organizational capabilities. The reserve list is reexamined and made more precise on an annual basis.

One of the most important factors in finding promising workers is certification. During the last certification within the system of GSSR Goskomselkhoztekhnika [State Committee of the Agricultural Equipment Association], which encompassed 4,106 directors, including 907 directors of kolkhozes, sovkhozes and interfarm enterprises, and which represents the nomenclature of the central committee and Goskomselkhozproizvodstvo [State Committee of the Agricultural Production Association], 3,834 individuals were shown to be worthy of occupying their positions and 117--unworthy. The reserve of cadres with high evaluations who were to be promoted included 155 persons. Of the 30,000 specialists working in all enterprises, about 20,000 passed certification.

At the same time it is important to note that there are still unsolved problems that hold back the process of improving agricultural management and the agro-industrial complex as a whole. What do we have in mind?

Total unity in the management of agriculture within the republic still has not been achieved; there is also duplication in the management of the rayon agro-industrial association. The structure and staff of the central apparatus of the republic's Goskomselkhozproizvodstvo and its subordinate organs, especially the RAPO apparatus, are in need of further improvements.

Measures to improve production-economic, financial and legal ties between kolkhozes and sovkhozes and procurement and processing enterprises have not been sufficiently perfected.

Many workers of the RAPO apparatus are not yet utilizing those rights which have been given to it by resolution. On the one hand this can be explained by the fact that in connection with poor training some people are not capable of delving deeply into new normative documentation; on the other hand, some comrades still have not overcome the psychological barrier against newness--not everyone has developed an analytical approach or formulated economic concepts.

Joint measures to decrease losses and to raise production quality are still being implemented poorly by ministries and departments of the APK which are not part of the Committee on Agricultural Production. At times the mutual

responsibility of parties for the fulfillment of contracts is low, and insufficient attention is still being given to important indicators such as cost, labor productivity, price, profits, net income and so forth.

Nevertheless, it must be said that all of the transformations within the management sphere proceeded with the simultaneous growth in the pace of economic potential of agricultural production as well as of all branches of the agro-industrial complex. It is thanks to the operation of the new APK organs that in 1983-1984 we were able to find additional reserves and to make up for great losses in the village due to unprecedeted bad weather.

During the years that the new management system has been in effect the volume of gross agricultural production increased by a factor of 1.7. Today the general union food fund is receiving more of the following from the republic: potatoes--an increase by a factor of 6, vegetables--by a factor of 1.8, fruit--by a factor of 2.2, and citrus fruit--by a factor of 3.5. The production of food branches more than doubled.

The Central Committee of the Georgian CP is viewing the transformations that have taken place as a new stage in the matter of improving the forms and methods of management not only of branches belonging to the agro-industrial complex and, first and foremost, agriculture, but of the republic's entire national economy. The renewal of the economic mechanism and an improvement in management--these involve an entire complex of questions related to improving the style of party management of the economy. But we feel that we cannot stop at this. Three branches, united under "one roof," represents a great force, to be sure, but it is still not the entire agro-industrial complex. We are now working on coordinating the production of agricultural products, their processing and their storage into one whole. This will provide a guarantee that the Food Program will be implemented at an accelerated rate.

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AGRO-ECONOMICS AND ORGANIZATION

DISCUSSION, COMMENTARY ON KUBAN AGROINDUSTRIAL COMBINE

Moscow SELSKAYA ZHIZN in Russian 20 Jul 85 p 4

[Article: "The First Steps of Kuban Combine"]

[Text] Economic Experiment

Our party is purposefully carrying out work to improve the management of the economy and the forms and methods of administration. The April 1985 Plenum of the CPSU Central Committee once again pointed to the necessity to further adjust the economic mechanism for managing agriculture and other branches of the agroindustrial complex. In the Baltic States, the Caucasus, the Black Earth Region, Siberia and other regions of the country thorough economic experiments are being carried out; they are directed at the overall development of cost-accounting relations and business ties between enterprises and service enterprises, at strengthening plan and labor discipline, at expanding the rights and responsibilities of cadres and at the development of creative initiative in all workers.

SELSKAYA ZHIZN has more than once discussed the experiments that are being conducted. Letters to the editors attest to the fact that readers are interested in these articles. For this reason, the newspaper intends to continue the extensive demonstration of economic research, to constantly inform the reader about the results of management innovations and to actively help others to utilize the best management methods in practical terms actively through its articles.

Today we will discuss an experiment being carried out in Timashevskiy Rayon of Krasnodar Kray. Here the Kuban Agroindustrial Combine (APK) has been in operation for over a year now. Why was the combine created and how? What has it achieved? What is hindering the development of the new? This is what we shall discuss.

First we must discuss what the Kuban Agroindustrial Combine consists of. It is a single production-economic complex in which large-scale agricultural production, procurement, thorough waste-free processing of all products from farming and livestock raising products, their storage, shipment and sale are organically unified on the basis of modern equipment and techniques.

The combine is made up of all kolkhozes, sovkhozes and interfarm organizations, associations of Selkhoztekhnika [Agricultural Equipment Association] and Selkhozhimiya [Agricultural Chemical Association], building, supply, processing, transport and planning enterprises, and the scientific-technical laboratory located in Timashevskiy Rayon. It also includes the sovkhozes of Sochi's Krasnodar Tea Production Association, the Dagomyskaya and Adlerskaya tea factories, the Tuapsinskiy State Fur Farm and a number of trade and public-nutrition enterprises. All of these enterprises and organizations have been separated from their ministries and departments and transferred to subordination to the council of the Kuban APK. The production activities of the combine as a whole and of every enterprise individually are carried out on the basis of complete cost accounting. All enterprises and organizations retain their own legal and financial independence.

The council is in charge of combine operations. It consists of representatives of all of the enterprises and organizations that belong to the APK. The council meets once per quarter and discusses the most important questions. The council chairman is the general director of the APK, Mikhail Mikhailovich Lomach. A council presidium is selected to effectively deal with problems. It includes workers from the party and enterprises and specialists and directors of enterprises, organizations and institutions. A specially-created apparatus deals with day-to-day operations. The rayon executive committee's agricultural administration has been eliminated here. The RSFSR Ministry of Agriculture has given the Kuban council the opportunity to select workers for itself and it has established limits on wages for it. A resolution foresees the right of the council to determine the number of workers and their salaries. This type of approach enables us to select experienced, effective and educated specialists.

We met many APK directors and specialists at various objects and spoke to them. Their answers to our questions characterize the activities of the combine fairly completely and comprehensively.

M. M. Lomach, the combine's general director, stated:

"Why was Timashevskiy Rayon selected for the experiment? This did not occur by accident. First of all, it is one of the largest and leading rayons in the Kuban; its soil-climatic conditions are extremely favorable for the development of many branches of agriculture. Here enterprises that process and store field and farm products have been developed to a certain degree. It is also important that the rayon is located in the center of the kray and that it is connected to cities and resorts as well as to the industrial centers of the Northern Caucasus by means of railroad lines and modern roads.

"It would appear that everything is available here for highly effective operations. But unfortunately, in production, and especially in the

processing, shipment, storage and sale of products there were serious shortcomings. Here is one example. It turned out that processing shops could process no more than 4,000 tons of fruit-vegetable products whereas 45,000 tons are cultivated. This means that produce must be shipped to other enterprises, sometimes to 'faraway places.' Of course, when this is done the quality of the produce decreases and losses and transportation expenditures grow inordinately. There have also been cases of departmentalization, which, as noted at the April 1985 Plenum of the CPSU Central Committee, still has not been completely eradicated despite the development of rayon agroindustrial organs. When the combine was organized this was also taken into account.

"Planning rights have also been expended. There has been a significant curtailment in the number of indicators confirmed for the combine from above. Instead of numerous goals, as was the case previously, the combine was assigned according to only four indicators--the volume of deliveries into the general union and republic funds, budget payments and allotments, wage funds and the volume of material-technical resources. All of the other indicators are elaborated independently by the combine. Plans for state procurement of agricultural products are not established for kolkhozes and sovkhozes. The combine itself confirms their plans for the sale of grain, sugar beets, sunflowers, vegetables, fruit and livestock products. Here the Kuban plays the role of the procurer of agricultural products. If a problem is found it is solved efficiently without any type of delay."

Efficiently and Advantageously

By 1990 the combine's collective intends to increase the production of grain by 30 percent, sugar beets--by 32 percent, vegetables--by 33 percent, fruit--by 20 percent, milk--by 55 percent and meat--by 25 percent as compared to levels for the current five-year plan. The renovation of enterprises and the building of new objects for the processing of products will enable us to sharply increase output, to expand the assortment of food products, and to deliver them to consumers in packaged form, in small and improved packaging. Thus, the production of sausages will increase by a factor of 4; of milk products--by a factor of 3.6. The output of many candy items, various types of ice cream, non-alcoholic drinks, juices, oil from the seed of the best types of sunflowers, various semi-processed products and bread and roll items is being organized anew. By the end of the 12th Five-Year Plan the general volume of gross production in agriculture and in the processing industry must reach 400 million rubles, an increase by a factor of 1.5.

In addition to the development of public production the participation of the population in increasing the production of poultry and rabbit meat, pork and especially of both labor-intensive and deficit crops such as raspberries, currants, strawberries, green beans, horseradish, garlic and others is on the rise. According to agreements, the combine will render aid to individual enterprises in the area of acquiring sowing materials and seed and of allocations of packaging and packing materials.

Still during the organizational period among the mass of great and small tasks one question arose--which enterprises of the processing industry must be built anew, which should be renovated and their capacities increased? After

studying the problem, builders proposed their plan. It determined the building of objects not only for the near future but for the long-term as well.

D. A. Gladchenko, deputy general director for capital building, commented:

"Already by the start of the current year the combine had a building program extending to 1990. This is very important--to precisely determine what to do when, how and with what forces. Within the combine we have the Kubanagroprojekt [Kuban Agricultural Planning] Institute, UKS [Administration of Capital Construction] and a building-installation trust-platform. On the basis of this platform we firmly intend to unify a number of building and installation subdivisions which were previously dispersed among different ministries and departments. The majority of them did not have a sufficiently developed production base and were on starvation rations in terms of material-technical supply. On the other hand, each one had an office, a microscopic garage and a narrowly-departmental program. Now there has been a change not only in their name but also in their work content. Within the trust we have a combine of building materials, an automobile column, two specialized PMK [Mobile mechanized columns] and five building-installation sections, each of which has several integrated cost-accounting brigades. The latter are called upon to fulfill all operations and to submit objects 'fully operational.' The elimination of intermediate administrative links on the basis of cost accounting brings great advantages. A great deal will be achieved by the elimination of departmental independence. It will be no less useful to enlarge building organizations.

"An important subdivision of Kuban APK is the rayon administration, Kubanagrosnab [Kuban Agricultural Supply Administration], which is tied directly to USSR Gosnab. It was created in December 1984 and was immediately noticed by the combine. Even before the new year some machines, equipment and materials began to arrive in the Timashevsk along this channel in accordance with orders put in by the combine. According to the schedule these items were not expected until January. This is efficiency worthy of praise.

"The combine's financial-accounting center [FRTs] is carrying out important work. This new subdivision, like no other in the country, has taken on the responsibilities of practically all economic and financial operations between their own and outside enterprises and organizations as well as with supply, procurement and trade organizations, USSR Gosbank and financial organs. By means of the FRTs the combine fulfills its function as a single borrower of loans, as the single payer of all monetary obligations of the Kuban and its links and as the single recipient of budget resources. The financial-accounting center composes drafts of financial and credit plans for the combine and develops and implements measures to fulfill goals related to carrying out assignments, to strengthening cost accounting and plan discipline and to achieving the self-support of farms, enterprises and organization belonging to the combine.

"Many of the concerns of FRTs workers are related to opening cost accounts, which will take accounting-monetary operations into consideration, for the combine's enterprises, farms and organizations. This provides the Kuban with

the opportunity to maneuver resources widely, to build the necessary structures and to supply them with the necessary equipment, to implement a single technological policy while utilizing the possibilities of every enterprise, to improve production uninterrupted, to create good living and cultural-everyday conditions for people and to reward their labor."

Without Middlemen

The most important goal that the combine's collective is setting for itself involves concentrating production, storage, processing and sale of food products in its own hands. We can already say that a considerable amount of production is sold via the combine's trade network. Six stores set up in Sochi, Krasnodar and Timashevsk are very popular. Several other trade points are being readied.

We decided to examine the store in the Komsomolsk section of Krasnodar. It has already been in operation for 6 months. The store's six departments supply almost everything that is produced on the Kuban's fertile soil.

Yu. G. Yeremenko, deputy director of the store, commented:

"We have 35-40 different types of products for sale here. This includes seven types of semi-smoked sausages, breast, brisket of pork or veal, beef, pork, poultry meat, subproducts, eggs, fresh apples, tomatoes, cucumbers, cabbage, onions, salted watermelon, steeped grapes, canned vegetables and fruits, walnuts, juices, marinades, filberts and many other items."

We spoke to customers in the store. Their evaluation of it was extremely praiseworthy--the store had many goods and the service was good.

V. P. Shevchenko, worker in the cotton and paper combine, commented:

"The store suits us from all points of view. We can say that it is what everyone has been waiting for."

V. T. Inanets, engineer in a biological factory, stated:

"One could not hope for anything better--everything is fresh and of good quality. There is a large selection and it takes very little time to shop. This is wonderful."

Customers viewed the prices for products with understanding as well. They are somewhat higher than state retail prices. Thus, a kilogram of first-class Moskovoretskaya and Moskovskaya sausage costs 5 rubles 10 kopecks, Poltavskaya sausage--5 rubles 60 kopecks, cervelat [Further translation unknown]--7 rubles 10 kopecks, ham--5 rubles 70 kopecks, breast and brisket--4 rubles, beef--3 rubles 20 kopecks, fresh apples--60 kopecks and salted watermelon--50 kopecks.

In every store we visited we saw a decorative excerpt from the Resolution on the APK. Consumers become familiar with the resolution's content: "The sale of products produced by enterprises and organizations which are a part of the

combine is carried out via the APK's own trade network, in the marketplace and to other consumers according to prices established by the combine's council and with a consideration of the quality of products, their packaging and consumer demand. In this case prices established by the combine council must reimburse expenditures for production, storage, processing and shipment of products and must also secure the necessary savings for production expansion."

M. M. Lomach, general director of Kuban APK, commented:

"The greatest proportion within the structure of the sales price is occupied by the cost of the given products. To this figure we add expenditures made by the combine's enterprises and organizations along the entire path taken by the product on its way to the consumer. In the course of calculations we also consider all types of payments into the budget and sums which are used to create our funds and profits. With all the different costs of food products with a consideration of expenditures for production, storage, processing and shipment, the average addition to price at the stage preceding sales equals 9 percent. Also, a 9 percent addition is made to the price for the commodity processing, shipment and sales of products. It is used to cover expenditures and to develop certain funds for the trade network.

"The advantages of direct ties have already been fully experienced by the residents of Sochi and by the numerous guests of the resort city. The 'field--store' conveyor is organized in the following manner. Early in the morning trucks are loaded directly at the plantation, and after lunch fresh produce is already available to Sochi residents. The distance to Sochi is not short--over 400 kilometers. Previously, when Timashevsk farmers sold their fruit and vegetables through the Sochi Fruit and Vegetable Trade Association, over half of the produce was damaged at the end point of the trip by the reception workers of this retail trade enterprise. Then while the fruits and vegetables lay around the enterprise's storehouses another portion was ruined. In this way, only an insignificant portion of that which was raised in the fields, in gardens and in orchards actually made it to the counter. Enterprises suffered great losses. The state and consumers were the losers. It is no accident that during the height of the season the market price for watermelon and tomatoes reached 1 ruble in Sochi, and for cooking corn--3 rubles per kilogram. And here suddenly there appeared an abundance of fresh and good-quality produce. A kilogram of watermelon or tomatoes was sold for 50 kopecks; ears of corn--for 30 kopecks. Today the combine has significantly expanded trade in the resort zone."

A. A. Nikishin, first deputy general director of APK Combine, commented:

"Not only are we supplying the resort visitors and residents of Sochi with hundreds of tons of high-quality produce, we have also 'knocked down' market prices by half and have soundly interrupted the 'business' of local speculators."

On the Basis of Self-Sufficiency

The conversation with the first secretary of the Timashevskiy Rayon party committee, Aleksandr Vasiliyevich Maslov, turned immediately to people. We

wanted to know whether in the course of the experiment there was a change in the attitude of directors, specialists and regular workers to the task at hand. Is there more order in the field and on the farm? How are labor, technological and plan discipline being adhered to?

A. V. Maslov, first secretary of the Timashevskiy Rayon CPSU Committee, commented:

"Of course there is more order. It could not be otherwise. After all, the experiment is geared toward increasing the responsibility of labor collectives for the end results. The precise conditions are clear and comprehensible to all--if you have worked well and have produced a certain amount of high-quality production according to the agreement, take what is given. If you produce in excess of the quota--take more. But if you produce less, don't ask for forgiveness and do expect your wages to be lower. The experiment has forced us to set different standards and to evaluate directors and specialists, who have been given more responsible production sectors, differently.

"No one is indulged. We were forced to part with some directors and specialists and to demote others. For example, following a declaration by the combine council the rayon committee recommended to a meeting at Kolkhoz imeni Kalinin that the administrative chairman, A. Bagmut, be relieved of his duties. Directors have been replaced in some other enterprises. Their work style was contradictory to the new administrative conditions and did not correspond to the new requirements. Misrepresentation and additions flourished and indifference and indecisiveness were demonstrated. Young, energetic specialists characterized by all the attributes that would enable them to become true organizers of modern production took the place of those who were let go.

"The basic efforts of the combine's directors and specialists are directed at raising the fertility of soil and at improving the quality of farming and livestock raising. This, as the workers of Timashevskiy Rayon correctly feel, is the most important internal reserve for increasing production and for improving the quality of products."

On the border between Dinskiy and Timashevskiy Rayon everyone's attention is attracted to attractive transparencies--it is planned to increase the productivity of Kuban wheat to 60 quintals, of corn--to 100 quintals, of sugar beets--to 600 quintals and of milk yield per cow--to 5,000 kilograms of milk per year.

We visited Rossiya, Iskra and 40 Let Oktyabrya kolkhozes, Industrialnyy and Krasnoselskiy sovkhozes and several enterprises of the combine and talked to many people. Naturally the subject of our conversation was the experiment. Everywhere we heard a positive evaluation of the first steps in the work of the combine's council.

N. M. Kaplenko, chairman of Iskra Kolkhoz, commented:

"We have more opportunities to plan production and to sell our products. The results of such an approach toward initiative 'from below' had an immediate effect during the first months of the combine's operations. On this basis the enterprise increased the production and sale of products, decreased losses, improved the quality of products and decreased the cost of production."

G. S. Beskrovnyaya, senior economist of Rossiya Kolkhoz, commented:

"Our enterprise receives over 500 rubles of net income per hectare of agricultural lands and has a high level of profitability. Nevertheless, work within Kuban Combine opens up new possibilities for improving economic indicators. The active transition to cost accounting and the introduction of a check system of mutual account-keeping will be very useful. The work of partners is becoming more cooperative."

V. Ye. Golub, director of Krasnoselskiy Sovkhoz, commented:

"Our enterprise lagged behind for a long time. A low profitability level did not permit us to carry out building or to acquire sufficient quantities of machines and equipment. Now the situation is changing for the better. Capital investments into housing and cultural-everyday construction are growing; equipment has begun to arrive. This will help us to reach the level of leading enterprises more rapidly."

A. A. Romanenko, chairman of 40 Let Oktyabrya Kolkhoz, commented:

"The specialists of Kuban Combine's apparatus delve into all of the fine points of production. It is important that the combine's council has no children or stepchildren. A scientifically-based method of supply has been put into practice. At any given moment we can tell you the quantity of equipment, materials, fertilizers and chemical preparations which have been allocated to every enterprise.

"A thorough restructuring is taking place in all links. We felt this to the greatest degree in terms of the work of the enterprise involved in production-technical servicing of agriculture, which previously was known as the rayon association of Selkhoztekhnika [Agricultural Equipment Association]. The situation is not just a matter of a change in signpost. The essence of work has also changed. Whereas previously all of the association's subdivisions--the special stores, the shops and the transportation enterprises--were only interested in fulfilling their plans without considering how their services affect the end results of work, today the efforts of this partner are subordinate to the interests of the kolkhoz and sovkhoz."

V. N. Tomilko, director of the production-technical servicing enterprise, commented:

"The basic indicator of our work is the coefficient of technical readiness of machines and equipment. It has been foreseen that workers will receive bonuses and incentives for achieving a certain level of the KTG [Coefficient of technical readiness]. Accounts with our clients are carried out only according to the limits of expenditures and of coefficients of technical

readiness. The greater the time between repairs, the higher the wages, and vice versa. In other words, notorious breakdowns are eliminated.

"Until quite recently serious criticism has been directed at the work of processing enterprises. The level of production in some enterprises is lagging behind today's demands. Let us look at Medvedovskiy Meat Combine. It is located in old and crowded buildings that have been adapted for its operations. For a long time the kray association of the meat industry did not carry out renovation work and did not allocate new equipment to it. As a result, the majority of technological operations are being carried out manually. Livestock was kept on the enterprise's platforms and in enterprises themselves beyond the established time frame. Tons of meat were gone with the wind. The situation involving the reception and processing of poultry was even worse. Where didn't kolkhozes and sovkhozes take their products! In many places they were turned away at the gate. Direct ties were only the stuff of dreams."

Ye. N. Marynenko, director of the meat combine, commented:

"There were 'bottlenecks' in every link of the meat conveyor. For example, we had to produce 15 tons of sausages and smoked items per shift. Actual productivity equalled 3.6 tons. Also, almost all operations were carried out by means of antiquated methods. Due to small volumes and primitive technologies the production of smoked items was unprofitable. The enterprise was one of the largest in the kray association, but it eked out a poor existence. There weren't even any plans to build or renovate even a single object during the next 6-7 years here. But now a smoke shop with a capacity of 1,000 tons of items per year has been built. The centralized resources of Kuban Combine were utilized for this. Moreover, a powerful cooler has been put into operation; a scale room and rooms that give access to other facilities are being equipped. In the near future the entire meat combine will be renovated. Several residential buildings, the need for which is very great, have been built."

Initiative and Accounts

In meeting in various parts of the combine with its general director, M. M. Lomach, we noted that he often uses the word "initiative," saying it at every opportunity and while addressing any worker. This, as the secretary of the Krasnodar Kray party committee N. I. Kondratenko noted, is not just a declaration but a principle and essence of APK operations.

The life of many labor collectives is permeated with a spirit of initiative and a search for the best solutions. We became convinced of this after becoming acquainted with the operations of the buro of economic analysis of the Timashevskiy Interfarm Complex for the fattening of cattle. At one of the last meetings the directors of subdivisions, and there are 11 of them, got up one after another to express themselves. They spoke fervently, topically and with interest. Each one tried to get to the root of why a certain price for good or services was established in his collective. Many questions were directed at the workers of the planning-economic and bookkeeping departments. Directors made the movement of material valuables more precise and

investigated the details of accounting and bookkeeping. In other words, the feeling of a real manager who is involved in everything and to whom every kopeck is dear came forth in each individual.

V. I. Popov, director of Timashevskiy Interfarm Complex, commented:

"This interest in the deep-laid phenomena of a specific economy, this energy and initiative are brought about by the purposeful utilization of intraenterprise accounting. Here we utilize a check system widely for accounting and control of expenditures of material and financial resources.

"The check system of mutual accounting is now being utilized in all kolkhozes and sovkhozes of Timashevskiy Rayon. And everywhere the innovation is evidently advantageous. It is important that practically every order and measure implemented by the directors of the Kuban are examined through a prism of comparing the cost of the end product with the means expended to produce it."

M. M. Lomach, the combine's general director, commented:

"It should be no other way. After all, our association operates on the principle of self-support. The more economically, creatively and productively we work, the lower the cost of goods and services. Consequently, the higher the profits. The same amount of attention given to cost accounting is given to the development of contractual relations. They encompass all basic and service enterprises within the combine. A progressive form of organizing and reimbursing labor has become the leading form used in kolkhozes, sovkhozes, at building sites and for transportation."

If We Eradicate Departmental Ways

[By N. Kopanov and Yu. Semenenko, Krasnodar Kray] In the successful fulfillment of the experiment the active, interested help of ministries and departments whose enterprises and organizations became part of Kuban Combine was of invaluable significance. Unfortunately, not all of them by far responded in this way. It is important to remember this right now in order that this indifference not spoil this important matter in the future not only here but also in other places during the transition to new management methods. Let us look at least at material-technical supply. Up until a certain time it was to continue in the same way as prior to the experiment. Nevertheless, a whole series of enterprises within the combine had their limits for fuel, repair materials and parts cut; the delivery of equipment, machines and mechanisms ceased. Some kray associations, with the knowledge of their ministries, even took back what had already been delivered to sites for installation. All of these material-technical valuables were then distributed among "their own" plants, factories and combines, as if their enterprises had suddenly become "strangers" as soon as they became part of the combine. In particular, a regional approach to the Kuban was demonstrated by union and republic ministries of the food, meat and dairy industry and procurement.

For a long time the lack of desire or inability to understand the essence of the experiment was exhibited by individual responsible workers within the USSR

Ministry of Finance and USSR Gosbank. It is true that in word they supported the innovation, but in reality for long months they opposed, for example, the development of the financial-accounting center. But after all, without it the combine would not be able to become a single economic organism and would be just a conglomerate of enterprises and organizations that are insufficiently tied to each other. It was only in April of this year, after extensive discussions, that the FRTs finally began its existence. But how much time was wasted!

We cannot understand the action of the USSR Ministry of Finances and the USSR State Committee on Labor and Social Questions, which tried to vindicate the preservation of a firm state schedule assigned from above. As before, they dictate how many and which types of workers must be available in the administration and in each subdivision of the APK. In essence they are still defending the idea which has already been proven to be unsuitable by life and practical experience concerning the fact that it is better to have two average workers with a wage of 150 rubles instead of one good worker with a montly salary of 200-250 rubles.

The lack of desire on the part of some ministries and departments to create more favorable conditions for the experiment can be also be felt in the fact that industrial enterprises have been allocated funds of material incentives in the same volumes as previously. This fund is in no way related to profits and to the results of operations within the combine. Thus, the collectives of a number of subdivisions have little interest, as before, in effective servicing of kolkhozes and sovkhozes and in the successful operation of the Kuban as a whole.

The directorate and specialists of the combine are carrying out energetic work to make the transition to cost accounting and collective contracts. This is one of the most important conditions that will enable the Kuban, by utilizing its internal reserves and possibilities, to decrease the cost of production and thus to achieve the elimination of state subsidies and to organize production within a system of complete self-support. But unexpectedly objections were voiced by trade unions and by the same ministry of finance. They felt that we cannot make basic wages dependent upon the end results of labor. It turns out that we must return to yesterday, paying specialists and directors specific salaries while paying regular workers according to the "cycle."

Building remains a problem area. We should already be developing new enterprises and renovating old ones, but how can this be done if as yet the organization of a new, promising subdivision, the trust-platform, is being hindered in spite of agreements with higher organizations? Little or nothing has been done to develop a powerful building base. The directors of RSFSR Minstroy [Ministry of Construction], who once visited Timashevsk, fervently promised that they will efficiently do everything necessary in order to put the building subdivisions of the combine on their feet more rapidly. Alas! The matter ended with promises. Here is the result. During 2 quarters of the current year the fulfillment of the plan of building-installation work has essentially been interrupted.

The Kuban is spreading its wings with more and more confidence, is increasing the delivery of high-quality products and is increasing its production and economic potential. In the rayon the renovation and technical reequipping of livestock-raising farms is being carried out intensively. Order is being brought to breeding work and accounting on farms, which in the past had brought about serious and justified censure.

Timashevsk farmers are carrying out field work successfully. Farms have been given a great deal of independence, and thanks to this there has been an increase in the area of the most valuable crops. The quality of farming has improved. All winter crops in the rayon are now cultivated according to intensive technology from sowing to reaping. Both last year and this year overall mechanization has been widely employed. Today Timashevsk farmers are doing everything they can to complete harvest operations within a compressed schedule and without losses. The building and renovation of enterprises for the processing, storage and shipment of field and farm products is being developed more and more extensively.

Last year the combine successfully fulfilled its plans; all enterprises were profitable. Profits exceeded 76 million rubles. Today a new, important step forward is being taken. During the first quarter alone the combine has made about 11 million rubles in profits, which is almost 2 million rubles more than last year's indicator for the same time period. With each passing day there is an increase in production volume, an expansion in assortment and an improvement in production quality.

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AGRO-ECONOMICS AND ORGANIZATION

APK ADMINISTRATION CRITICIZED, UNIFIED MANAGEMENT ADVANCED

Moscow IZVESTIYA in Russian 20 May 85 p 2

[Article by A. Dubko, chairman of Progress Kolkhoz, deputy of the USSR Supreme Soviet and Hero of Socialist Labor, Grodno Oblast: "The Land Needs One Manager"]

[Text] I remember how happy we kolkhoz chairmen were when the RAPO [Rayon Agro-Industrial Association] was being created. As if we could be anything but! For the first time, the agro-industrial complex was being singled out as an independent planning and administrative object. This has always been the dream of farmer and chairman alike. We were glad that the land would have an independent manager with complete authority. He would raise, procure, process and sell his products to the state.

We would accumulate and direct capital investments into areas in which they were most needed, where they would "work" best. After all, agriculture was in need of the ability to maneuver resources--in some places there were abundant resources and in others--scant; a farmer would receive a ruble while his partners would receive a chervonets [a gold coin worth 3, 5 or 10 rubles]! But now suddenly several enterprises and associations were joining together in order to work according to a single program and under a single administration. What could be better?

But disappointment came quickly. I don't want to generalize too much--perhaps things turned out well in some places. But in our rayon (as well as in our oblast) the most important thing, for the sake of which everything was done, was not achieved--a real association did not develop.

How can we seriously speak of unity or wholeness if every partner is afraid to give up even a part of its independence and self-sufficiency and if every partner continues to have his own production-financial plan, his own plan for profits, his own state schedule and of course his own higher administration.

The signboard is a common one but every "rapovets" [RAPO member] rows for himself and doesn't even stop before swindling his closest partners. For example, each partner has his own laboratory for determining the quality of the same products.

Everyone says, "We are plowing," and takes refuge in the fulfillment of the Food Program. At first sight it appears that they actually are fulfilling it, but how? The kolkhoz that produces grain, potatoes and meat may remain unprofitable, but enterprises which process these products receive profits, bonuses and payments on a sliding scale for work in excess of the plan. This is wonderful, isn't it?

Let me begin with planning. As long ago as November of last year we knew what and how much our kolkhoz would have to sell. But what the kolkhoz is to receive according to this plan is still unknown to us as of today. This is true at least for most things. That is the first problem. Here is the second. Since the goal of all partners within the agro-industrial complex is the same--to obtain the maximal quantity of products from fields and farms with minimal expenditures--planning must also be the same, comprehensive and flexible. If one of the partners has a problem it must be eliminated immediately through a joint effort regardless of the departmental subordination of the partner. After all, the end result is the same and an error on the part of one partner affects all other partners equally.

This is what was thought when the RAPO was created. But in real life, in practice this is not so. Each partner continues to talk about himself and to worry only about his own interests. Here is a convincing example for you. The processing of livestock became a bottleneck within our RAPO. A characteristic of our breed is that after a weight gain of 470 kilograms all subsequent weight gain involves an inefficient expenditure of feeds. This appears to be good only at first glance--producing an "extra" 100 kilograms of meat (it is at this weight that we must maintain our feeder cattle). The feed that is used for these extra 100 kilograms could be used to fatten another head of cattle to a weight of 470 kilograms.

What is happening? The oblast has not yet managed to meet the goals of the Food Program and already the processing industry cannot deal with the volume. It seems that the thing to do would be to put aside all building and to put all resources into expanding the capacities of the meat combine. According to RAPO law this is what should have happened. After several unsuccessful attempts to solve this problem on the RAPO level we were forced to deal with the critical situation by means of our own efforts--we are building our own slaughter and sausage shops as well as a shop for whole-milk substitutes.

Well, all right, we can allow ourselves the "luxury" of having our own processing industry. Last year we had 7 million rubles of net income and our level of profitability was 53 percent. We have over 4 million rubles free on account and are concerned with how to use this money. But other enterprises that belong to the RAPO do not have this kind of money--they cannot build their own processing shops and must depend on the "kindness" of partners. And these partners are not rushing to their aid too quickly. They have their own plans, fulfill them with interest and bear profits rather than losses.

At a meeting of the CPSU Central Committee on 8 April, which I also participated in, everyone spoke fervently and with great interest about organizational and technical discipline and about the great responsibility each individual bears for the matter at hand. There was also a discussion of

irresponsibility. All of us agreed that irresponsibility and slackness were among the main reasons for many of our shortcomings.

I will prove that this is so by means of examples. The irresponsibility of Selkhoztekhnika [Agricultural Equipment Association], which becomes rich on plowmen, has been discussed from many tribunals and at all levels. But things do not change--everything remains as before. This includes the irresponsibility of Selkhoztekhnika.

Let's look at what Selkhoztekhnika's responsibilities are as our partner with regard to the tractor that was repaired by the organization and that stopped working at midday in the field. It has no responsibilities. But this situation brought a loss to us, even if not a very great or noticeable one. Something was lost, neglected or late. And what did Selkhoztekhnika lose? Nothing--on the contrary, it "found" something. Every tractor repaired by it cost us 2-2.5 times more than repairs would have cost in our own shop.

According to RAPO theory, everything that is not advantageous for the main producer, i.e. the kolkhoz, should not be advantageous to all partners, including Selkhoztekhnika. In life we find that the reverse is true. By having a monopoly on spare parts, our fraternal partner, Selkhoztekhnika, dictates our conditions to us. The limit on repairs of BDT-7 disc harrows is 57 kopecks per year, but the cost of one link alone is 5 rubles 70 kopecks.

For the sake of fairness it must be said that here not only Selkhoztekhnika is at fault--so are the departments involved in price formation. Prices for spare parts, equipment, fuel, mixed feeds and building materials are growing more rapidly than those for meat, milk, potatoes and sugar beets. This results in a lack of balance.

Sometimes we in the RAPO are like the swan, crab and pike...Recently we had a torrential rainfall. The machine operators from Selkhozhimiya [Agricultural Chemical Association] continued applying mineral fertilizers to crops as if everything was normal. I said to them, "What are you doing, dear friends? Please stop, don't multiply the damage." They listened to me, stopped what they were doing, and in the evening appeared in my office, saying I was to sign a document concerning their enforced idleness and to pay for this lost time. "Why should I pay? After all, the weather interfered with both your and our work equally." "This does not concern us," they answered. "The weather is your affair. You forced us to stop work, now sign this and pay up."

Or here is another example. Each year we sell the state 20,000 tons of beets. It would seem that we are equal partners and that we are both concerned with the matter at hand and with the end results. Don't force us to ship beets to you when our means of transportation are in short supply and when you cannot receive and process the beets on schedule anyway. You should receive the beets at the production site and credit our accounts; give us an "ironclad" schedule and we will deliver the beets to you when you need them and when the situation regarding the means of transportation eases up a bit.

But no, we have to ship the beets to the sugar plant when the line there is kilometers long; we have to lose workdays, 24-hour days and weeks. And we return home with empty trucks. A month to a month and a half later we must return to the plant to pick up pulp, and again the truck is empty for one leg of the trip. If we add up all the dry runs, the idleness and the needlessly-consumed fuel this will amount to a large number of rubles. But again these are the losses of the kolkhoz and not of its partners. These losses have no effect on the profits, bonuses or sliding-scale payments of the collective of the sugar beet plant. Why? After all, the end result is one--the harvested and processed product--sugar. And the wastefulness is also our common responsibility. We just do not understand why the kolkhoz must pay for it when it is the least guilty party.

And we work more than the others. During 4 years of the five-year plan our lowest harvest was 43.4 quintals per hectare, and our highest--49.8 quintals per hectare; of milk--918 quintals per 100 hectares of land and of meat--345 quintals. But what we could do if our partners really helped us! That is where our reserves lie; we do not have to search far. They are right under our noses. We just cannot take hold of them because of our separateness.

I could provide two dozen more examples that prove that we are partners in the RAPO only on paper, and not in real life. But this does not mean that I am opposed to the agro-industrial complex. On the contrary, I am thoroughly convinced that it is a dependable path towards great and real success. But I am also convinced about something else--in a great matter such as this we cannot stop at the halfway point. We have stopped not even at the halfway point but at the beginning. It is impossible to develop an effective, vital association on a rayon scale alone. What are the other links? They include the oblast and the republic.

I personally can see two reasons why we did not move farther and higher than the rayon. The first is that we went through such a hurried, unthought-out reorganization, representing compromise, that it frightened us. "What, another reorganization? No thanks, we've had enough." If you get burned drinking milk, you begin drinking water. But after all reorganizations do differ. If we see that success is moving directly towards us, why turn away from it and pass it by? For an intelligent person there is no alternative.

But here the second reason comes up--the great resistance of the administrative apparatus in oblast and republic links. If an association is created on this level there will be a natural, automatic curtailment of the apparatus; many duplicate or parallel subdivisions will fall away as unnecessary. The savings would be considerable and advantageous to the state and the people. But no one is eager to leave the comfortable chair he has been occupying for many years, to become accustomed to something new or to change the habitual stereotype of work and life. It is for this reason primarily that most voices are "against" change. Opposed to the association are the ministries of agriculture, reclamation and the fruit and vegetable industry as well as Selkhoztekhnika, Selkhozkhimiya and others.

I cannot suggest a specific way to accomplish this--perhaps either by creating some type of single "supra-ministry" organ or by completely eliminating all

ministries and forming a single committee in their stead. This matter requires careful thought and evaluation; haste should not be tolerated. But I feel that the thought expressed at the April 1985 Plenum of the CPSU Central Committee is of cardinal importance--the land needs one manager. He must have the function of planning for all organizations (which have an involvement with the land). He must have single balance books, limits on capital investments and material-technical resources, the right to confirm state norms and to have his own means and the right to influence enterprises which process raw materials and so forth. The APK must be planned, financed and managed as a single whole on all levels.

It is not so easy to do this, but it must be done--this is the will of life.

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INTEGRATION PROCESSES OF APK DEVELOPMENT EXAMINED

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[Article by Professor Ye. Ogleblin, doctor of economics, and Professor A. Dzhakhangirov, doctor of economics, All-Union Scientific Research Institute for Agricultural Economics : "Features of the Contemporary Stage in the Development of Integration Processes in Agriculture"]

[Text] The systematic intensification of agricultural production, its industrialization and the conversion of individual sectors to an industrial basis require definite organizational conditions which would make possible high returns from the steadily growing investments in this sector. Under contemporary conditions production resources can be more rationally utilized and plan targets successfully met only on the basis of integration processes requiring the development of various forms of collaboration and the combined efforts of individual enterprises and organizations.

One of the features of the contemporary stage in the development of integration processes in agriculture and other sectors of the agro-industrial complex is its transformation from spontaneous development to planned, regulated activity directed towards the realization of the Food Program. A practical expression of this process is the establishment of integrated (interfarm and agro-industrial) formations, which have a number of substantial advantages compared to individually functioning kolkhozes, sovkhozes and enterprises in other sectors of the APK. As is known, this is due not only to the considerable differences between them with regard to production concentration levels, but to the creation, at enterprises in such formations, of more favorable conditions for realizing all the achievements of science and technology, for improving production standards, introducing more modern and economical technology and for organizing farms on a genuinely scientific basis. Scientific research and progressive practice have proven that integration is effective primarily by qualitatively transforming agricultural production through its further intensification and industrialization.

The term "integrated formation", which has appeared in the economic literature and in practical work in recent years, very vividly reflects its organizational and economic essentials as the totality of individual, independent enterprises and organizations which have been brought together and legally formed to carry out joint production, service or other activities in order to more rationally use productive, labor, and financial resources and to

assure more economically efficient production. Above all, this is a system of enterprises and subdivisions combined into a single production-economic organism of a higher order and functioning according to a single coordinated program (a single plan).

The absolute majority (95 percent) of the integrated formations involve the development of horizontal integration, while only 5 percent of the total number, in 1984 this was 13,200 units, involve vertical (agro-industrial) integration. Thus, the basic form of integrated production in contemporary agriculture is interfarm cooperation.

Interfarm enterprises are operating almost everywhere in all union republics. The greatest share are in the RSFSR -- 41.7 percent, and in the Ukraine -- 34 percent. Kolkhozes and sovkhozes performing production operations on an interfarm basis have been set up in all the union republics, with the exception of the Kirghiz SSR, the Armenian SSR, the Moldavian SSR and the Lithuanian SSR. By 1983 their number had increased 1.8 fold over 1983.

Recently agro-industrial associations have been developed to an ever greater extent. Based upon rational specialization and cooperation between groups of agricultural, processing and other enterprises under a single management, these are an organic combination of agricultural production, industrial processing and storage and, in a number of cases, trade. Of a total of 178 such associations, 47 are in the Ukraine, 43 in Moldavia, 41 in Azerbaijan and 28 in the RSFSR. Almost all of these associations have been set up in the USSR Ministry of the Fruit and Vegetable Industry and the USSR Ministry of the Food Industry.

Interfarm cooperation is most widespread in meat and dairy livestock operations. More than 50 percent of the country's interfarm formations are engaged in beef production and heifer raising. There are also a sizable number of such enterprises and production associations in poultry raising. There are also mixed interfarm formations, that is for feeding some types of livestock, for example, cattle, pigs or sheep.

The integration process in various crop production sectors also has its specific features. Its development rates are uneven. Interfarm cooperation, especially agro-industrial integration, is developing more rapidly in vegetable raising and orchard operations than in other crop production sectors. At the beginning of 1984 there were 269 fruit and vegetable interfarm and agro-industrial formations, which accounted for 25 percent of all vegetables produced in the public sector and 20 percent of the fruit so produced.

There has been development in interfarm cooperation in feed production and processing. Interfarm enterprises for feed production are the most widespread: in 1983 there were 121 such units. In addition, farms have been organized to produce animal products using their own feeds.

There are 16 specialized seed growing kolkhozes and sovkhozes for growing grain crop and grass seeds on an interfarm basis, 2 interfarm enterprises and 39 production associations.

The deepening of ties between science and production is a characteristic feature of the present stage of integration. An important role in expanding and strengthening this process is played by scientific-production associations (NTO), which include all elements essential for research and development on scientific problems, right up to the production introduction of results. The creation of NTO is an understandable consequence of agricultural production specialization and concentration based upon interfarm cooperation and agro-industrial integration, transforming science to a direct productive force.

At the beginning of 1985 there were 63 scientific-production associations, of which 42 were in the USSR Ministry of Agriculture, 6 in the USSR Ministry of the Food Industry and 15 in other ministries and departments. In agriculture, the majority of such associations are specialized in the production of varietal and hybrid seeds, seedstock and in raising breeding livestock for kolkhozes and sovkhozes.

A significant share of interfarm and agro-industrial enterprises and associations work effectively, exerting a marked influence upon production growth in the public sector and economic growth at cooperating kolkhozes and sovkhozes. An analysis of experience in the country shows that if the basic principles in their establishment and operation are observed, the activities of the main organizational forms for interfarm cooperation and agro-industrial integration have a definite effect and promote the more rational use of available labor, material and financial resources in agriculture and other enterprises.

A study of the dynamics of production activity indicators for interfarm enterprises shows that in recent years they have stabilized somewhat. As a rule, compared to animal farms at kolkhozes and sovkhozes, interfarm complexes have higher productivity, expend considerably smaller amounts of labor and feed per unit of output, production costs are significantly lower, while labor productivity and profitability are higher. The data in the table show these improvements in all the economic indicators of these enterprises.

Experience acquired in various zones and regions of the country shows that the establishment of interfarm enterprises has made it possible to utilize large reserves for increasing beef production.

The organization of beef production on the basis of interfarm cooperation, observing organizational and technological requirements is having an ever growing influence upon the efficiency of livestock raising at kolkhozes and sovkhozes supplying young animals for feeding. Take, for example, Krasnodar Kray, where there are 25 interfarm enterprises for raising and feeding young cattle. Every year their share of the kray's total meat animal production is increasing. Between 1965 and 1983 total beef production in the kray increased 1.5 fold, while at interfarm enterprises it increased 11 fold. During this time interfarm enterprises' share of total beef production increased from 3 to 26 percent. In the past 17 years interfarm enterprise capacity for raising and feeding cattle has increased almost 4 fold, their agricultural land area has increased 5 fold, the capital-labor ratio has increased to 23,500 rubles, and the energy-labor ratio to 422 horsepower. In recent years beef production has

grown not through the establishment of new interfarm formations, but through production capacity expansion at existing enterprises and the allocation of land to them so they can organize and strengthen their own feed supply base.

Table 1.

Main Indicators of the Work of Interfarm Enterprises and Organizations (excluding construction)

	1981	1982	1983
Livestock and poultry raised (total live weight, 1,000 tons)	660	678	697
Production costs per quintal of live weight increase, rubles			
Cattle	162	169	165
Pigs	140	146	144
Gross output, billions of rubles	1.46	1.56	1.61
Net profit, millions of rubles	452	498	792
Profitability, percent	9.9	10.7	16.3

In the past 10 years, the kray's interfarm enterprises for raising and feeding cattle have saved kolkhozes 390 million feed units worth of feed, while reaching planned live weight growth. The feed saved can produce more than 38,000 tons of additional beef. Savings of labor in feeding animals amounted to 5.9 million person days and monetary-material resource savings totalled 89.8 million rubles.

In Kanevskiy Rayon, Krasnodar Kray, the interfarm enterprise for raising and feeding cattle accounts for about half of the rayon's beef production plan. The enterprise has a decisive effect upon the economy of the sector as a whole. Here, as a result of the development of cooperative beef production, there have been substantial improvements in the basic technological and economic indicators for the interfarm enterprise and for all farms participating in this cooperation. Over a 10 year period the average daily weight gain increased 1.6 fold in the rayon, labor outlays per unit of output declined more than 2 fold, 23,400 rubles worth of output was produced per worker employed in cattle raising and feeding, almost 2 fold greater than the Kray average. During the time the interfarm enterprise has been in operation, the live weight of cattle in the rayon has increased 1.54 fold, beef sales to the state have grown 48 percent and total profits for the sector as a whole at kolkhozes and sovkhozes have increased 2.5 fold.

Since 1974 the Mir Sovkhoz in Baranovichskiy Rayon, Brestsk has been raising and feeding young cattle on an interfarm basis. It purchases 15-20 day old male calves from all kolkhozes and sovkhozes in the rayon for 13 rubles per kilogram of live weight and after intensive feeding until the animals reach

470-490 kg sells them at an average of 2.81 rubles per kg. Taking into account distributed profits, cooperative participants' earnings per male calf delivered for feeding when 15 days old amounts to more than 900 rubles. This makes it possible not only to completely cover all outlays for the reproduction of the young animals, but also to obtain 650-700 rubles of net income (profit) annually.

The majority of interfarm and agro-industrial formations have stable, high economic indicators. At the same time, practical experience shows, that the potentials of these forms of production organization are far from completely utilized. This is linked to a number of serious shortcomings in the interfarm cooperation process. In the rush for quantitative indicators, in a number of places the new forms for production organization were created without sufficient organizational-economic substantiation, in isolation from the urgent needs of kolkhozes and sovkhozes. Their activities did not always correspond to the basic principles of cooperation. These shortcomings are now well known and ways of eliminating them have found reflection in a number of normative documents and recommendations.

One must also note that, unfortunately, in a number of regions organizational measures have been taken which did not bring positive results. For example, in a number of places there was not always a well substantiated transfer of interfarm enterprises to the balance sheets of kolkhozes and sovkhozes, production associations were broken up and interfarm enterprises established by kolkhozes and sovkhozes were liquidated.

In recent years, when the country's agriculture has experienced serious difficulties because of unfavorable weather conditions, it has become very obvious that the development of interfarm cooperation cannot be viewed in isolation from other important directions in the development of agricultural production: the intensification of all its sectors, the introduction of scientifically based agricultural systems for different natural and economic zones, the improvement of the economic mechanism for farm operations at all levels of agro-industrial complex management.

One of the basic measures for implementing the Food Program is the further integration of the entire agro-industrial complex, in particular, interfarm cooperation within the framework of rayon agro-industrial associations (RAPO). It should be noted that the interfarm formations now existing in the country were set up primarily on a sectoral basis at all levels, while the organizational basis for their functioning was mainly the administrative rayon. These formations were also set up primarily at the rayon level. In some cases the process went outside the boundaries of a single rayon. As a result, giant interfarm formations were set up with the participants being kolkhozes and sovkhozes from several, and sometimes, many rayons. This practice did not justify itself everywhere. It was therefore quite properly recommended to set up interfarm formations as a rule within an administrative rayon.

In recent years specialists and managers have come to the opinion that in practice the RAPO should assume all the functions of interfarm formations, thus liquidating problems in their functioning and development. There is no need to show the error of such views. It is only within RAPO that there are

genuinely favorable conditions for the further development of production cooperation and combination and for the more complete realization of the potentials in this process.

The Standard Statute on RAPO states that they are obligated to elaborate and systematically implement economically well based production specialization and concentration. However, so far, this task is not at the center of their attention. It is one of the most important strategic tasks, the solution of which should be directed towards improving production organization in order to increase its economic efficiency. With the creation of RAPO a situation has evolved in which the integration process has moved from the improvement of organizational forms to the improvement of management. The attempt to solve a number of organizational-economic questions at the rayon level, while retaining APK enterprise and organization subordination to different departments has so far not had substantial results, while considerably less attention is given to the development of cooperation and agro-industrial integration at intra and interrayon levels.

Life shows that this situation is unjustified. It is necessary to strengthen the positive tendencies in the improvement of organizational forms for production and to consider this direction an important strategic task. The further development of interfarm cooperation and agro-industrial integration should be thoroughly promoted and stimulated as a progressive process, evidence of further improvements in the standards of socialized production and labor in agriculture and other spheres and sectors of the agro-industrial complex.

The need to improve contemporary production management also puts into the forefront important organizational questions such as determining optimal levels of specialization, creating a system of specialized enterprises, establishing rational production and economic ties between them and principles for their effective functioning under conditions of expanding production integration.

Production agricultural and agro-industrial associations functioning on the basis of a head enterprise have not received the necessary development. It is known that they are the most improved and promising organizational forms for interfarm cooperation and agro-industrial integration. The underestimation of the promise of such associations, and the huge increase in interfarm enterprises are consequences of very many specialists failing to understand the essentials of these new organizational forms for production.

Experiences acquired in a number of sectors of the national economy, including agriculture, shows that small production associations, made up of 3-5 enterprises functioning according to a single coordinated plan and based on a head enterprise assure the more rational organization of production on the basis of day to day maneuvering of production, labor and financial resources, the establishment of closer ties between individual enterprises and the creation of genuinely unlimited possibilities for deepening their specialization. Such associations more completely show the advantages of integration, that is, of production cooperation and combination, which is inherent to all types of integrated formations. Such associations could

include enterprises with different forms of socialist property and thus assure their gradual merging.

In recent years there has been unjustifiably broad development of agro-industrial associations at the oblast (kрай) level, which are engaged more in management functions than directly in production organization. Above all, this applies to agro-industrial associations in the USSR Ministry of the Fruit and Vegetable Industry, the USSR Ministry of the Food Industry and a number of departments.

The activities of rayon and oblast agro-industrial associations as modern management organs, and of sectoral associations at the republic and oblast level, including the experimental Estonian Agro-Industrial Association, primarily involve management improvements in the agro-industrial complex. However, these associations are still not a unified production-economic organism and are by no means realizing the clear advantages of integrated forms for production organization.

Apparently, as the development levels of rayon APK's improve and they completely master all management functions, it becomes necessary to have closer production and economic ties between all enterprises and organizations and to make further improvements in the operating mechanism. This will create conditions for gradually transforming RAPO from management organs to organizational forms for production and, in some places in the more remote future, to agro-industrial combines. The Kuban experimental agro-industrial combine, set up in Timashevskiy Rayon, Krasnodar Kray, is a prototype for such a form.

A number of specialists, looking very far ahead, have doubts about the advisability of developing horizontal ties, that is, interfarm cooperation, thinking that even now only agro-industrial cooperation should be developed. In fact, in the course of development these forms converge and the integration process will increasingly acquire a vertical character. However, now and in the more remote future, horizontal collaboration between agricultural enterprises in the most diverse directions will not only be advisable, but objectively necessary.

This is shown by experience in Hungary and Czechoslovakia, in which the basis of integration in agriculture is interfarm formations of a horizontal nature, production systems, joint enterprises and cooperative circles.

Experience shows that the principles for the functioning of integrated formations have, on the whole, been elaborated. However, the very poor preparedness of cadre for work in the developing integration process is a serious brake on its further development. It should be said that many farm specialists at rayon and oblast agro-industrial associations have very vague ideas about this process and are not psychologically prepared for work under such conditions. It is very important to take this into consideration when organizing training, and especially retraining of management cadre and specialists in agriculture and the entire agro-industrial complex.

An important task for RAPO is the elaboration of prospects for the development of interfarm cooperation and agro-industrial integration in rayons. Each rayon should have a substantiated plan for these processes, for the further systematic deepening of specialization at all enterprises in a rayon's agro-industrial complex. The elaboration of such a plan must begin with a thorough analysis of the situation in the rayon, the levels of production specialization and concentration and the discovery of the potentials and most effective directions for developing the social division of labor. Provisions should be made for the most promising directions and alternatives for deepening specialization, establishing interfarm, agro-industrial, state-kolkhoz and other formations which would meet the requirements for production organization on an industrial basis. These plans should also reflect possible alternatives for the integration of the private subsidiary plots of kolkhoz farmers and workers and employees with public production, the development of specialized private subsidiary farms at industrial enterprises and organizations and their integration with other enterprises in a rayon's APK.

General plans for the development of specialization in each rayon must be worked out for the long term (at least until the year 2000), making provisions for specific temporal stages in their realization. In working out such plans on a rayon and oblast level it is advisable to use the recommendations made by the USSR Ministry of Agriculture, VNIESKh and other scientific institutions with regard to specializing and concentrating agricultural production on the basis of interfarm cooperation and agro-industrial integration. If carefully prepared and done in an organized manner, this work is a substantial contribution to the process's further development, something which undoubtedly has a positive effect upon the final results of activities by all enterprises in the agro-industrial complex.

The work directed towards improving the management of the agro-industrial complex which has been done in recent years in our country and in all CEMA countries is substantially strengthening the fundamental principles of unity within the framework of specific territories. It also helps create conditions permitting each agricultural enterprise to master rational systems of crop and animal production appropriate to local conditions, to introduce the most productive varieties and hybrids of agricultural crops and animals, as well as industrial technologies and to put the entire arsenal of science and progressive experience at the service of agriculture. This creates favorable conditions for the development of integration in breadth and in depth.

All this is evidence that high rates of technical and technological modernization of agricultural production based upon the introduction of industrial technologies urgently requires the scientific substantiation of fundamentally new organizational forms of socialist agricultural production at the lower level. It is also necessary to have forms which would permit, on the basis of further deepened specialization and increased concentration, the highly efficient use of bioclimatic potentials, material labor and financial resources, considerable reductions in work times and improvements in the rate of return on growing capital investments in agriculture and other sectors of the APK. The fundamentally new organizational forms for production should correspond to the new, significantly improved level of productive forces.

Given high rates for the mastery and introduction of industrial technologies in plant and animal production, one of the promising organizational forms might be the industrial-production system (IPS). The basic goal for the formation of such systems is to assure the scientifically based resource-technological balance of a unified process and the coordination of the activities of all APK enterprises and organizations participating in all preparatory and technological stages in production, processing and sales. In essence, any IPS should be a unique, interdepartmental, territorial-sectoral association working on a long term basis according to a single agreed upon program, and in which the participants are equally interested in final results.

Practical experience and research by Soviet and foreign economists has shown that the formation of an IPS as a new form for the organization of integrated production depends upon the creation of the objective prerequisites for their successful activity.

Based upon experience in the functioning of production systems accumulated in Hungary, results from the elaboration of vertical systems (product subcomplexes) in Czechoslovakia and scientific research by Soviet economists and agricultural experts, the basic prerequisites for the establishment and functioning of ISP in Soviet agriculture have been formulated. They might include: a high level of scientific-technical progress in the sector and in its material-technical base; the transformation of agriculture to an industrial basis; improvements in specialization based upon further development of the integration process in agriculture; a level of production concentration making it possible to use machinery systems for crop and animal production; the presence of a formation capable of assuming authority for the organization of industrial production at kolkhozes and sovkhozes and for giving them consultation on the introduction of scientific recommendations, for coordinating the activities of enterprises and organizations engaged in the production, procurement, transport, storage and processing of agricultural products. An analysis of these prerequisites has made it possible to conclude that the present level of material-technical support for agriculture, the degree of scientific-technical progress and significant advances in the organization of production and labor have created favorable conditions for the introduction of IPS.

In some zones and sectors of agricultural production there could be different alternatives of such industrial-production systems which, within the framework of a given territory, would organically combine into a single whole a scientifically based technology and the optimal organization of production and sales of the final product. The organization of such systems will make it possible to organize individual product subcomplexes in a given territory, a very important and urgent task under present conditions.

It is advisable to form at the rayon level, and when necessary at the interrayon level, industrial-production complexes for the production, processing and sales of agricultural products (grain, industrial crops, fruit, vegetables, feeds, animal products). The leading element in the sectoral and territorial system should be the head enterprise, the functions of which might be performed by a technological center (seed growing, reproductive or breeding

operations, specialized animal husbandry complex, interfarm enterprise, etc), or any other agricultural enterprise which has attained stable and high indicators for the production of a given type of agricultural product. The head enterprise (system center) is obligated to not only be the main possessor of progressive industrial technology, but to have good stable indicators for its introduction.

One of the main goals of the industrial-production system is the dissemination of the head enterprise's positive experience to other farms entering the system so that the main production indicators (crop yields and animal productivity) of all system participants will approach its indicators as quickly as possible. Another important goal is to activate and improve the work of all organizations in the production infrastructure and their orientation towards attaining final results from agricultural production in the zone serviced. Thus, there is a close intertwining of horizontal and vertical ties in the system being formed.

Practice shows that only if lagging farms are pulled up to the level of average farms, and average ones to the level of the best can there be substantial increases in agricultural production.

In essence, an IPS is an organic embodiment of the corresponding product subcomplexes within a given territory. For each specific case it is necessary to work out a mechanism for the head enterprise (system center) to influence the surrounding farms, with both having an interest in attaining better results.

When the IPS is forming, each regional product subcomplex is to be clearly examined not only with regard to the need and prospects for efficient further development of interfarm cooperation and specialization on a production stage, intra and interfarm basis. Through this the systems can deepen the rationalization of production, and not only its production structures, that is its organizational forms. Under these conditions interfarm cooperation is gradually transformed into interfarm integration, presuming radical changes in the entire production process simultaneously at all cooperating enterprises.

The formation of industrial-production systems as productive subcomplexes in regional (above all rayon) APK should in no way disrupt the integrity and unity of agricultural enterprises (kolkhozes and sovkhozes). As experience shows, farms' participation in or belonging to several systems will not complicate the organizational-management situation, and will make it possible to introduce science and progressive experience into all the main sectors of a farm, rather than into just one.

Not all the organizational, much less the economic questions involving the formation of industrial-production systems in our conditions have been well researched. However, experience in the successful functioning of integrated formations is evidence of the undoubted progressiveness of this direction for improving agricultural production organization during intensification and industrialization.

Interfarm cooperation and agro-industrial integration are not directed towards "eroding" the contemporary socialist enterprise as the main organizational form of agricultural production, but towards their thorough strengthening and steady improvement. In essence, this is the next stage in the maturity of socialist production relations, involving a new, considerably increased socialization of production and labor. This process is a factor in scientific-technical progress and the systematic intensification of agricultural production, and in assuring further improvements in its results and economic efficiency in order to more completely meet the public's demand for foodstuffs and industry's demand for raw materials.

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AGRO-ECONOMICS AND ORGANIZATION

BUREAUCRATIC OBSTRUCTIONS HINDER KAZAKH APK FUNCTIONING

Alma-Ata NARODNOYE KHOZYAYSTVO KAZAKHSTANA in Russian No 8, Aug 85 pp 50-52

[Article by P. Chertorogov, docent, candidate of economics, AINKh [Alma-Ata Institute for the National Economy]; D. Amanzholov, senior scientific associate, AINKh candidate of economics, and R. Amirkhanov, senior scientific associate, AINKh: "Intersectoral Linkages or Interdepartmental Barriers?"]

[Text] The well known CPSU Central Committee and USSR Council of Ministers decree: "On Improvements in the Economic Relations Between Agriculture and Other Sectors of the National Economy", approved in accordance with the decisions of the May (1982) CPSU Central Committee Plenum, defines measures for the development of the APK.

It especially stresses the need to increase the responsibility of enterprises and organizations servicing kolkhozes, sovkhozes and other agricultural enterprises with regard to the quality and times for completing work and services.

Great importance is given to strengthening the interest of enterprises and organizations servicing kolkhozes, sovkhozes and other agricultural enterprises and organizations, and of procurement enterprises and organizations in attaining high final results and growth in the economic efficiency of agricultural production.

More than a year and a half have passed since the date this decree was approved (July 1983). There are undoubtedly qualitative improvements in economic relations between agriculture and other elements of the APK and in the management of the agrarian sector as a whole. There have been perceptible common efforts of APK partners to attain the best results.

Nevertheless, there is still an acute problem of assuring coordination and balance between agriculture and other participants of the APK, and of the effectiveness of intersectoral ties, which exist not only on paper, but also in actuality.

Using Kaskelenskiy Rayon in Alma-Ata Oblast as an example, we will examine agriculture's dependence upon adjacent spheres and the role of intersectoral ties.

This rayon is in a favorable climatic zone and produces a variety of products: more than 30 percent of the oblast's vegetables, 25 percent of its fruit, 26 percent of its milk and 15 percent of its potatoes. Its farms have 32,700 head of cattle, including 12,900 cows; 127,300 hectares of agricultural land, including 55,300 of tilled land. The average annual value of fixed productive capital for agricultural purposes exceeds 181 million rubles and amounts to about 146,000 rubles per 100 hectares of agricultural land.

The rayon annually sells the state more than 60,000 tons of produce, about 40,000 tons of milk and more than 5,000 tons of meat. In 1984 gross output totalled 67.5 million rubles. Farms in the rayon are specialized in milk and vegetable production; milk accounts for 38.9-40 percent of total commercial output and vegetable output 17.0-20.6 percent.

The rayon agro-industrial association includes 16 sovkhozes and experimental farms, 4 plants, 14 construction organizations and more than 20 enterprises servicing the countryside. The RAPO sees its main task as that of giving all sovkhozes and enterprises assistance in fulfilling state plans and, using help from the state and APK partners, of making farms profitable.

Reserves for increasing production volume and improving quality involve the intensification of leading sectors and the more effective use of potentials in the rayon. However, these reserves are often not put into effect, as they are scattered among APK participants, who retain "their own" planning, material-technical supply, construction, specialization, etc.

The RAPO was to have liquidated departmental barriers in the agronomic and engineering services and delineated a special group for interfarm economic ties in the planning-economic department.

The new management system foresaw a qualitatively new organizational and economic mechanism for operations and the unified coordinated management of enterprises and organizations in the RAPO. To some degree this has happened, but there is still fragmentation in RAPO management of agricultural organizations, service and processing enterprises.

As previously, service and processing enterprises in the RAPO are accountable to their superior organizations for all financial-operational activities, but only answer to the RAPO council for the time and quality of the work performed. True, this is already giving some positive results.

The RAPO promptly discovered and eliminated the factors hindering the establishment of mutually beneficial production ties between farms and procurement and processing enterprises. For example, previously Selkhoztekhnika (it is interregional) restricted itself to a number of obligations to farms. As a result, several times as much resources were allocated to the material-technical base of rayon Selkhoztekhnika as were to the repair base for the rayon's sovkhozes. The quality of repair work on agricultural equipment was low, repair costs were rising from year to year and farms had sizable expenses.

The interrayon division of Selkhoztekhnika does not provide sovkhozes with enough equipment or spare parts. This situation is made more complicated because farms in the rayon obtain tractors and combines from the Chemolganskiy base of Selkhoztekhnika, while animal raising equipment comes from the Dzhambul interrayon division of Selkhoztekhnika. Therefore, many farms are "compelled" to turn to republic Glavsnab [Main Supply Administration] for spare parts, bypassing the RAPO. This organization for material-technical supply does not promote positive results. In addition repair work on tractors and tractor engines is done on contract with enterprises located in Dzhambulskiy Rayon (village of Uzun-Agach) and Iliyskiy Rayon (village of Pervomayka).

This scattering of equipment and repair bases markedly influences the quality of machinery, tractor and combine repairs, servicing and operation. Also, it is very expensive for farms to have equipment repaired in Selkhoztekhnika repair shops. For example, to have a K-700 tractor repaired at Selkhoztekhnika shops it costs 1,200-1,300 rubles, compared to 500-600 rubles at farm shops.

In 1984 only 2 motor vehicles and 1 tractor were repaired at Selkhoztekhnika shops. This year it is planned to repair only 29 of 754 tractors and 1 of 462 vehicles at such shops. All grain combines will be put in running condition at the farms.

The rayon Selkhoztekhnika is not engaged in the comprehensive servicing of animal farms. What is the reason for this? It is because this service has its own commercial turnover plan and exerts all efforts to fulfill it.

All the same, there have been changes. The RAPO council's efforts have created an optimal division of labor between farms and Selkhoztekhnika as the basis of production relations. They have started to take into account the condition of repair bases at enterprises in the RAPO. The rayon Selkhoztekhnika now has greater responsibility for the delivery of machinery, materials and spare parts directly to farms and there are improvements in service and spare parts deliveries to farms. Even though there have been difficulties, the system of awarding Selkhoztekhnika workers bonuses according to norm indicators for machine-tractor fleet readiness on a calendar schedule basis has been introduced.

The agrochemical service has more rapidly restructured its work in the farms' interests. On its own, it delivers mineral fertilizers, hauls organic fertilizers to the fields, chemically treats crops, etc. Last year it so hauled 87 percent of the mineral fertilizers and 20-25 percent of the organic, considerably more than in 1983.

It is working with farms on a contractual basis for plant protection. At the Leninskiy Sovkhoz agrochemical measures for protecting onions have increased yields by 90 quintals per hectare and on the Druzhba Sovkhoz cucumber yields have been increased by 45 quintals per hectare. Through this alone, profits at this farm were increased by 43,200 and 2,100 rubles.

Chemicalization points, such as the one set up at the Aksay Sovkhoz, are helping to obtain the greatest returns from the work performed. Here they are more effectively introducing recommendations for timely applications, the observation of dosage rates and methods for fertilizers and poisonous chemicals, work quality has improved, the accounting for chemicals has been brought into order and transport and storage losses reduced.

This has reduced mineral fertilizer consumption at the sovkhoz by more than 10 percent and simultaneously increased crop yields. The concentration of material and technical resources for chemical applications and the proper organization of labor have made it possible to increase productivity and reduce outlays for the preparation and application of fertilizers and poisonous chemicals.

The productivity of agricultural machinery has grown: manure spreaders -- by 32 percent, mineral fertilizer applicators -- by 38 percent. Now the problem is to disseminate this experience to all farms in the rayon.

The RAPO's organizational and economic unity should be served by a centralized fund necessary for the stable and balanced development of all APK components, for the material stimulation of production and the technical reequipment of sovkhozes and other enterprises. The statute for forming such a fund has now been worked out. It includes three articles: material incentives; production development; social-cultural measures and residential construction. Unfortunately, so far only farms and enterprises producing material goods have participated in the formation of the Kaskelenskiy RAPO centralized fund. Rural contractors, and "services" ["obsluga"], obtaining their money for "assistance" are, to put it lightly, very reluctant about transferring their money to this fund.

According to RAPO data, in 1983 the centralized fund totalled 145,500 rubles and in 1984 had grown to 199,000 rubles. This is clearly not very much growth. It might have been otherwise if, for example, last year the PMK [Mobile mechanised column] Trust No.6 had transferred part of its profits to the RAPO instead of the oblast agro-industrial association, even though this trust is located in the rayon. It turns out that even the RAPO and the oblast APO cannot agree.

It is necessary to mention one more problem: in recent years many farms in the oblast have started introducing waste-free production technology. This work is being done at the Druzhba and Prigorodnyy Sovkhozes, where tomato pulp is produced. The situation would be even better if the partner, an Alma Ata fruit cannery, had organized the processing of pulp into tomato paste. However, last September the cannery did not accept 30 tons of pulp from the Prigorodnyy Sovkhoz, referring to a lack of capacity. A valuable product simply went to waste.

Here are other examples: a facility for processing hot peppers is operating at the Druzhba Sovkhoz, and construction has begun on facilities to process mustard and horse-radish; at the Chemolganskiy Sovkhoz they are producing juice and canning dill and parsley; fruit processing facilities are operating

at the Sovkhoz imeni Chapayev and the KIZ OPKh [Kaskelenskiy Institute of Agriculture] Experimental Farm] and sauerkraut is being made at the Aksay Sovkhoz (on contract with an Alma-Ata fruit cannery).

Again, everything involves interdepartmental barriers: processing enterprises accept only 5-10 percent of the gross harvest of these crops. There is only one way out: increase these enterprises' capacity. However, this should not be done by the rayon, but by the appropriate oblast departments.

We posed, (and are implementing) the task of producing more, but we do not give enough concern to its arriving at workers' tables. Thus, intersectoral linkages are blocked by departmental barriers.

Progressive forms for selling vegetables and milk through direct ties with stores and processing enterprises have been being introduced in the republic for a long time. However, in the Kaskelenskiy RAPO there is not yet a system for selling vegetables through direct ties with stores, following the principle "from field to store". This is in a rayon supplying the republic capital.

Is it really such a difficult problem to collect information about demand and assortment from trade points and then give orders to receiving points about how much and what assortments should be sent to which point?

What is the milk sales situation? Only the Chemolganskiy Sovkhoz and the KIZ OPKh have direct ties with processing enterprises. This is why, in 1983, the Chemolganskiy Sovkhoz only sold 96 percent of its grade A milk and the KIZ OPKh only sold 93 percent. The farms earned additional profits from chilled milk (41,800 and 24,700 rubles respectively, which is 30.5 percent of such profits for the total rayon).

The remaining farms, supplying grade B milk and even ungraded milk, suffer huge losses.

The first steps in the RAPO's work to improve intersectoral ties between APK partners have had positive effects upon production-economic indicators for the rayon's farms. Thus, on the average, the 1983-1984 plan for vegetable sales to the state was 104.5 percent fulfilled, for meat the figure was 104.3 percent, and for milk it was 101.9 percent. By 1984, the average yield per forage cow had increased by 380 kilograms compared to 1982 and was 3,300 kilograms. Compared to 1982, agricultural gross output increased by 17.2 percent and the output-capital ratio by 12.1 percent. However, the results would be even greater if all economic tools influencing the relations of APK partners were put to use.

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AGRO-ECONOMICS AND ORGANIZATION

EFFECTIVE USE OF FUND EXPENDITURES IN RSFSR AGRICULTURE DISCUSSED

Moscow FINANSY SSSR in Russian No 8, Aug 85 pp 26-27

[Article by N. Ye. Annenskaya, senior economist, RSFSR Minfin [Ministry of Finances]: "Strengthening Controls Over Fund Expenditures"]

[Text] For over 3 years the RSFSR's agricultural branch has been fulfilling the goals of the Food Program, which was passed by the May 1982 Plenum of the CPSU Central Committee. During this time the economies of kolkhozes and sovkhozes have been strengthened considerably, positive changes have occurred and positive tendencies have been noted. However, in the process of implementing the indicated measures there arise many questions, the successful solution of which will affect the continued development of agricultural production. A special place is occupied by the problem of effective use of state funds.

Each year the kolkhozes and sovkhozes of RSFSR Minselkhoz [Ministry of Agriculture] receive large funds from the budget; moreover, the volume of budget financing is growing constantly. In recent years allocations from the budget for sovkhoz development alone increased by a factor of 1.6; at the same time total payments into the budget, although on the increase, have comprised 4-4.5 percent of total budget allocations. Society, which invests its resources into agricultural development, has a right to demand their effective utilization and a rapid return on them.

The direction of financial resources into areas which are most advantageous from the point of view of the overall development of the national economy is a very complicated matter, and its successful achievement is impossible without strict financial controls. For this reason, at the present time the significance of the control function of finances and financial control on all levels is immeasurable.

In 1984 RSFSR Minfin, together with the Russian Republic Office of USSR Gosbank, examined the correctness and special-purpose use of funds allocated for agricultural development. Instances in which kolkhoz and sovkhoz funds were rechanneled into areas that are not related to agricultural production were uncovered in 28 autonomous republics, krays and oblasts. Their total value comprised over 40 million rubles. In the course of the investigation it was established that local financial and agricultural organs give little

attention to controlling the use of allocated funds, as a result of which the sums of rechanneled funds have not decreased in recent years. Kolkhoz and sovkhoz means continue to be used for the building of hospitals, housing, buildings and regional centers as well as for improvements in cities and regional centers.

The funds of Zarya Kolkhoz of Matveyevo-Kurganskiy Rayon, of Pobeda Kolkhoz of Remontnenskiy Rayon and of Meshcheryakovskiy and Andreyevskiy sovkhozes of Rostov Oblast were utilized to build four apartment houses in the regional center for non-related organizations at a total cost of 170,000 rubles. Similar cases have been noted in the enterprises of the Tatar and Bashkir ASSR's, Krasnodar Kray and Saratov Oblast.

In recent years a great deal of attention has been given to strengthening the material-technical base of kolkhozes and sovkhozes and to equalizing it as compared to industrial enterprises. Examinations in 43 autonomous republics, krays and oblasts established cases of gratuitous transfer of fixed capital totalling 6 million rubles to outside organizations. For cash, kolkhozes and sovkhozes continue to acquire passenger cars and motorcycles from the market fund according to retail prices by using profits from the sale of agricultural products and the wage and salary funds of kolkhoz farmers. It was discovered that in 1981 5.6 million rubles were used in this way. In particular, Novaya Semya Kolkhoz of Karasukskiy Rayon, Novosibirsk Oblast, used cash to purchase a Niva passenger car and two IZh motorcycles in 1984, at a total cost of 13,000 rubles; these vehicles are registered to private parties and are not included on the kolkhoz's balance. The purchase of transportation vehicles from the market fund according to commercial prices took place in the enterprises of the Udmurt ASSR, Altay Kray, Astrakhan, Volgograd, Smolensk, Tambov, Tula, Chita and other oblasts.

The increase in procurement prices for agricultural products since 1 January 1983 and the introduction of supplements to procurement prices have become powerful factors in strengthening the economies of low-profit and unprofitable enterprises. According to 1983 work results, in the RSFSR their number has decreased significantly. However, the possibilities of the price mechanism in intensifying agricultural production are not utilized fully by far. Let us just note that the introduction of a system of supplements decreases the significance of price as an incentive to a considerable degree. At the present time supplements play a decisive role in the formation of receipts from sales as well as in profits of enterprises. This is the second channel (after direct budget financing) according to which budget funds reach enterprises. According to our calculations, receipts from the sale of products by kolkhozes and sovkhozes of RSFSR Minselkhoz increased by 32 percent as compared to 1982, including as a result of increased prices and the introduction of supplements--by 30 percent. The kolkhozes and sovkhozes of RSFSR Minselkhoz have received a total of 7 billion rubles in the form of supplements to procurement prices, which comprised about 80 percent of the total sum of profits. How were supplements distributed over various types of agricultural products? In the distribution of quantities of budget appropriations allocated to the republic for introducing supplements to procurement prices for products sold to the state by low-profit and unprofitable enterprises, the priority problems dealt with were those of

equalizing economic conditions in production development and of creating the possibilities for carrying out genuine and not formal cost accounting in the republic's kolkhozes and sovkhozes. Under existing conditions over 90 percent of the allocated sums for increasing procurement prices and supplements to them are allocated for providing incentives for livestock production output. This creates the prerequisites for achieving a stable financial status.

The experience of 2 years of work provides the opportunity to draw certain conclusions in this area. First of all we should note a significant increase in the productivity of basic types of agricultural products. Kolkhozes and sovkhozes of RSFSR Minselkhoz achieved profits of 11.5 billion rubles in 1983. In 1984 kolkhoz profits equalled 6.4 billion rubles. Despite the work that has been done, in the areas of improving the price mechanism and of improving the effectiveness of agricultural production there are still many "troublespots". As a result of the non-fulfillment of the state plan regarding the procurement of agricultural products by a number of economically-weak enterprises which are included on the list for receiving payments of supplements to procurement prices, in 1983 200 million rubles were underutilized. Whereas in the republic as a whole the aforementioned funds were assimilated by 97.2 percent, in North Osetian ASSR they were assimilated by only 80.7 percent, in Altay Kray--by 87.4 percent and in Rostov Oblast--by 88.4 percent.

Significant losses are being borne by the enterprises of RSFSR Minselkhoz due to underpayments for non-delivered products. As a result of a selective examination alone, underpayments valued at a total of over 3 million rubles were discovered.

The effectiveness of utilizing budget appropriations earmarked for supplements to procurement prices for products delivered to the state by low-profit and unprofitable enterprises depends to a large extent on which enterprises these funds will be directed into. Cases have been found in which highly profitable enterprises have been included on the list for receiving supplements--in Arkhangelsk Oblast the list includes Krasnoye Znamya Kolkhoz, which has had an average profit level of 76.5 percent over the last 3 years, as well as Belomor and Severnyy Rebak kolkhozes with a profit level of 46.6 and 43.4 percent respectively.

The role and significance of the budget in the development of agricultural production has increased. In connection with this, with the goal of increasing the effectiveness of utilizing funds it is essential to improve work related to financial control, paying special attention to adherence to financial law for the purpose of utilizing all available funds correctly and in a goal-oriented manner.

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AGRO-ECONOMICS AND ORGANIZATION

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IMPROVEMENT IN EFFICIENCY OF APK MATERIAL-TECHNICAL BASE SOUGHT

Moscow IZVESTIYA TIMIRYAZEVSKOY SELSKOKHOYAYSTVENNOY AKADEMII in Russian No 4, Jul-Aug 85 pp 3-12

[Article by M. I. Sinyukov, Department of Organization of Socialist Agricultural Enterprises: "Material and Technical Support for the USSR Food Program"]

[Text] The communist party and the Soviet government devote a great deal of attention to consistent implementation of Lenin's agrarian policy and to development of the country's agriculture and the agroindustrial complex as a whole. A manifestation of the concern of the party and government for increasing the production of products from crop growing and animal husbandry branches and further improving the well-being of the Soviet people is the adoption of the country's Food Program for the period up to 1990, which was drawn up in keeping with the decisions of the 26th Party Congress and approved by the May (1982) Plenum of the CPSU Central Committee.

The preparation and implementation of such a program is a principally new step in the system of our planning and in the management of the socialist economy. The program embodies the comprehensive target approach to solving the most important economic problems. The main feature of this approach is coordinating and combining the work both of agriculture itself and the branches of industry and transportation that serve it and placing all of their activity in the service of a common final goal--the production of high-quality food products and the delivery of these to the consumers. For the first time the agroindustrial complex is singled out as an independent object for planning and management.¹

The Food Program has set the task of increasing the productivity of grain crops by 6-7 quintals during the decade, bringing it up to 21-22 quintals per hectare by 1990. It is intended to increase the average annual grain production under the 12th Five-Year Plan to 250-255 million tons, meat (in slaughtered weight)--to 20-20.5 million tons, milk--to 104-106 million tons, and eggs--to 78-79 billion.² In addition to this it is intended to considerably expand the production of fruits, vegetables and other agricultural products. All this will make it possible to satisfy more fully the demand of the population for food products, especially those such as meat, milk, vegetable oil, vegetables and fruits (Table 1).³

Table 1--Consumption of Main Food Products
(per capita per year, kg)

<u>Products</u>	<u>1980</u>	<u>1990</u>
Meat and meat products	58	70
Fish and fish products	17.6	19.0
Milk and dairy products	314	330-340
Eggs	239	260-266
Sugar	44.4	45.5
Vegetable oil	8.8	13.2
Vegetables and melon crops	97	126-135
Fruits and berries	38	66-70

A most important condition for carrying out this task is further development and strengthening of the material and technical base for agriculture and other branches of the country's agroindustrial complex.

During the years of Soviet power our country has done an immense amount of work for the development of the material and technical base of all branches of the national economy. In a relatively short period in history we have constructed large plants for tractor, automotive and agricultural machine building. In addition to this, for the service of agriculture we have created such new branches as machine building for animal husbandry and feed production, the mixed feed and microbiology industry and rural construction; the use of aviation has been expanded considerably on the kolkhozes, sovkhozes and other agricultural enterprises.

In recent years there has been a marked increase in the production capacities of branches involved in the procurement, storage and processing of agricultural products, and also production and technical service for the kolkhozes, sovkhozes and other agricultural enterprises.

All this exerts a positive influence on the development of the country's agroindustrial complex, which is shown convincingly by figures from the USSR Central Statistical Administration (Tables 2, 3, 4, 5).⁴

Table 2--Products, Fixed Production Capital and Number of People Employed in USSR Agroindustrial Complex

<u>Year</u>	<u>Volume of Products, billions of rubles</u>	<u>Fixed Production Capital (at end of year), billions of rubles</u>	<u>Average Annual Number of People Employed in Production Branches</u>
1970	233.3	158.5	43.4
1975	297.4	247.5	43.5
1980	353.5	351.4	43.7
1983	451.2	452.2	45.2

Thus from Table 2 one can see that during the period from 1970 through 1983 the fixed production capital of the APK increased almost threefold, the volume

of output during this time--almost twofold, and the number of workers--by 1.8 million.

Table 3--Structure of USSR Agroindustrial Complex (1983)

Sphere of APK	Volume of output		Fixed production capital		Average Annual Number of Employees	
	Billions of rubles	%	Billions of rubles	%	Billions of rubles	%
I	71.3	15.8	73.7	16.3	6.4	14.1
II	201.2	44.6	291.7	64.5	28.5	63.1
III	178.7	39.6	86.8	19.2	10.3	22.8
Total	451.2	100.0	352.2	100.0	45.2	100.0

In 1983 more than 30 percent of the fixed production capital, the gross social product and the number of workers employed in the country's national economy were in branches included in the APK (including branches that provide it with means of production).

One can judge the proportions of individual spheres in the agroindustrial complex from the figures in Table 3. Thus among branches of the APK a central position is held by agriculture and forestry; they account for 64.5 percent of the fixed production capital, 63.1 percent of the overall number of workers and 44.6 percent of the overall volume of output.

Table 4--Growth Rates of Overall Volume of Industrial Output
in Various Branches Included in APK (% of 1970)

Year	For All Branches of Industry Included in APK	Including:	
		Those That Provide APK With Means of Production	Those That Process Agri- cultural Raw Material
1975	135	163	130
1980	152	209	143
1981	156	218	146
1982	161	227	151
1983	170	244	158

Transportation plays an important role in serving the branches of the agroindustrial complex. In 1983 the proportion of cargo for agriculture and cargo from agriculture in the overall volume of cargo turnover on rail transportation amounted to 16.1 percent, river transportation--4.3 percent and automative transportation--7.5 percent.

In the modern stage the formation of the material and technical base for the APK is characterized by an expansion of interbranch ties and accelerated rates of development of industry which provides the agroindustrial complex with means of production (Table 4). If in all branches of industry included in the APK the volume of output during the period from 1970 through 1983 increased 1.7-fold, in branches that provide the agroindustrial complex with means of production the increase was 2.44-fold. At the present time about 90

percent of the fixed capital in agriculture is composed of products from industrial enterprises; at the same time each year the proportion of agricultural products that go for industrial processing increases (more than 50 percent).

Table 5--Proportion of Products and Fixed Production Capital (%) of Branches of Industry Providing APK With Means of Production (1983)

<u>Branch</u>	<u>Volume of Output</u>	<u>Production Capital (at end of year)</u>
Tractor and agricultural machine building	47.9	31.1
Food machine building	5.4	3.1
Repair of tractors and agricultural machines	24.9	24.2
Production of mineral fertilizers and chemical means of plant protection	16.7	34.3
Extraction of peat for agriculture	1.1	1.9
Microbiology industry	4.0	5.4

From Table 5 one can see that in the structure of fixed capital 31.3 percent comes from tractor and agricultural machine building, and 34.3 percent is composed of capital associated with the production of mineral fertilizers and chemical means of plant protection. But in the structure of industrial output the greatest proportion (47.9 percent) comes from items from tractor and agricultural machine building, which provides for reequipping agriculture and other branches of the APK with new technical equipment and raising the level of mechanization and automation of production. During recent years especially there has been an increase in the volume of deliveries to agriculture of tractors, combines and other machines, as a result of which the technical potential of the branch has increased considerably. At the beginning of 1984 in agriculture there were 2,697,000 tractors, 794,000 grain combines and a large quantity of other agricultural machines and implements. The energy capacities per one agricultural worker amounted to 29.7 horsepower, and per 100 hectares of planted land--333 horsepower.

The volume of the gross agricultural output in 1983 as compared to 1975 increased by 20 percent, and labor productivity (in the public sector of production)--by 28 percent. In 1984, in spite of the unfavorable weather conditions, the production of the gross output increased by 5.6 percent as compared to the average annual level during the first 3 years of the 11th Five-Year Plan, and the profit of the kolkhozes and sovkhozes amounted to 18 billion rubles.

But agriculture and other branches of the APK have large reserves and capabilities of further increasing the intensiveness of production and increasing labor productivity. These involve first and foremost acceleration of the rates of technical reequipment, increased capital availability for production, and increased energy and capital availability for labor.

General Secretary of the CPSU Central Committee Comrade M. S. Gorbachev in a speech at the extraordinary March (1985) Plenum of the CPSU Central Committee emphasized: "We will have to achieve a decisive turn in the direction of changing the national economy over to a basis of intensive development. We should, we must reach the most advanced scientific and technical position, the highest level of productivity of public labor in a short period of time."

Research shows that in terms of the level of supply of fixed capital agricultural production still lags behind many branches of the national economy. Thus at the beginning of 1984 the capital availability for labor per one agricultural worker on an average for the country amounted to 11,100 rubles, and this is approximately five-eighths of the average for all branches of the country's industry. As concerns the availability of technical equipment for labor, in agriculture it is equal to 2,200 rubles, and in industry--7,000 rubles per one worker. But the seasonal nature and other peculiarities of agricultural production dictate the need to have the availability of equipment for labor in this important branch no less than in industry which, as a rule, produces a great economic effect.

According to calculations of specialists, about 350 production operations in agriculture are done by hand and 16 million people are employed in carrying them out; agriculture has only 60 percent of the kinds of machines necessary for comprehensive mechanization of technological processes.⁵

The main reason for the large expenditures of live labor consists in the insufficiently high level of development of sphere I of the APK. As was noted above, 45.2 million people were employed in branches of the agroindustrial complex in 1983. And workers in branches of industry that provide the APK with means of production comprised only 6.4 percent, in capital construction--7.7 percent, and in all taken together--14.1 percent (sphere I of the APK). At the same time, 63.1 percent were employed directly in agriculture and forestry (sphere II) and 22.8 percent in branches for procurements and processing of agricultural products and delivering them to the consumers (sphere III).

Acceleration of the rates of development of industry which provides branches of the APK with means of production and the latest technical equipment for comprehensive mechanization of production processes contributes to reducing expenditures of live labor and changing the structure of the agroindustrial complex in the direction of sharply increasing the share provided by nonagricultural branches. Thus according to data of V. I. Nazarenko, in the United States in 1910 11 percent of the value of the products came from sphere I of the agroindustrial complex, in 1970--30 percent; for sphere II--54 and 17 percent, respectively; and for sphere III--35 and 53 percent respectively, that is, for the indicated period of time the share of nonagricultural branches in the overall production of products of the APK almost doubled and the proportion of products from agriculture (in spite of the absolute increase) decreased to one-third.

As for the structure of the overall labor expenditures on the production of products of the APK in the United States, "...approximately three-fourths of all people employed in the agroindustrial complex are in nonagricultural

branches and only one-fourth are in agriculture. Moreover the share of the entire agroindustrial complex in the overall number of people employed in the country's economy is decreasing.⁶ Similar tendencies can be observed in other industrially developed countries.

It is noted in the USSR Food Program that a long-range task for machine-building ministries and departments of the APK is to complete mainly in the period up to 1990 comprehensive mechanization of farming and animal husbandry and technical reequipment of the food branches of industry. In this connection it is intended to considerably augment the existing fleet of machines. Thus while in 1961-1970 agriculture received 2,570,000 tractors and 856,000 grain combines, in 1971-1980--3,473,000 and 988,000 respectively, and in 1981-1990 it will receive 3.74-3.78 million and 1.17 million, respectively. During the current decade fixed production capital in agriculture and in the food branches of industry will increase 1.5-fold, and the energy capacities on the kolkhozes and sovkhozes--1.6-fold.

An important area for further improvement of the material and technical base of the APK is improvement of the structure of fixed production capital--an increase in the proportion of the more active part of it (tractors, combines and so forth), which, all other conditions being equal, contributes to a considerable growth in the effectiveness of production. The fact is that with an increase in the production of the active part of fixed capital (all other conditions being equal) there is an increase in the quantity of means of labor which lead to movement with the same or, as a rule, a smaller number of workers who participate in the process of the production of agricultural products. At the same time mechanical and other means of labor transfer part of their value, which is equal to the annual sum of amortization, to the newly created product. These free services of past labor, which are embraced and enlivened with live labor, as K. Marx noted, accumulate with an increase in the scope of accumulation.⁷ All this in the final analysis provides for rapid growth of the volume of the gross output with reduced expenditures of labor and material and monetary funds.

Thus in the group of kolkhozes in Moscow Oblast where active capital comprised an average of 24.3 percent, the gross output per one man-day amounted to a total of 9.1 rubles, and then the group of funds for the proportion of active funds amounts to 45 percent, the value of the gross output increased to 13.1 million rubles, that is, 44 percent more. The output-capital ratio and the profitability of production are also considerably higher. The ratio between the value of buildings, structures and technical equipment in the former case was 1:0.5, and in the latter--1:0.8, that is, much better.

But this important factor is still not fully taken into account or utilized for purposes of increasing the effectiveness of public production. The growth rates of active means of labor lag behind the rates of increase in other constituent parts of capital expenditures. For example, at the end of 1983 the proportion of machines and equipment in the structure of fixed production capital in agriculture, according to data of the USSR Central Statistical Administration, amounted to 16.8 percent as compared to 20.1 percent at the end of 1962. While in 1962 the ratio between buildings and structures and conveyance devices (on the one hand) and machines and equipment (on the other)

was equal to 2.4:1, in 1983 it was 3.8:1, that is, it had changed in the direction of increasing the passive part of the capital.

In the leading agricultural enterprises the proportion of the active part of fixed capital is considerably higher than the average for the country. Moreover the rates of its growth outstripped the growth rates of other means of production.

From the standpoint of improving and substantiating an efficient structure for fixed production capital for agriculture, data concerning the proportion of mechanical means of labor in the fixed capital of all industry are of a certain amount of interest. At the beginning of 1984 machines and equipment comprised 39.4 percent here, and power machines and equipment comprised 7.6 percent while working machines and equipment accounted for 29.0 percent. In the food industry machines and equipment accounted for an average of 46.9 percent, including in the sugar industry--41.3 percent, the meat industry--24.3 percent, the butter, cheese and dairy industry--33.6 percent, and the fishing industry--74.7 percent of the fixed production capital.⁸

According to calculations of economists, in the future the proportion of machines and equipment in the overall structure of fixed production capital in agriculture should increase to 44-49 percent, and buildings and structures will decrease to 32-35 percent. This ratio bears witness to the industrial nature of production and the high technical level of the development of the branch, and it is one of the main factors in reducing expenditures of live labor and increasing the effectiveness of public production. Here the best results are possible when extensive mechanization is combined with other factors in intensification of production, especially chemization, land reclamation and the introduction of the achievements of science and advanced practice.

In agriculture the land is the main means of production, the source of wealth of the sovkhozes, kolkhozes and other agricultural enterprises. K. Marx noted: "...Labor is not the only source of the consumer values it produces, a substantial wealth. Labor is the father of wealth, as William Petty says, and the land is its mother."⁹

As we know, our country has a great land potential. According to data of the USSR Central Statistical Administration, as of 1 November 1984 the overall area of agricultural land amounted to 605.9 million hectares, including plowed land--227.5 million hectares, hayfields--40.6 million hectares and pastures--332 million hectares. But the soil on a considerable part of this land is distinguished by high natural fertility. About 70 percent of the area of agricultural land and more than 60 percent of the plowed land is located in arid regions. At the same time the land of many farms of the Nonchernozem Zone of the RSFSR, Belorussia and the Baltic area is too moist.

On the whole the bioclimatic potential for a considerable part of the agricultural zones of the USSR is lower than in many countries of Western Europe and America; compared to England and Denmark--two-thirds, the FRG--10-17th, France--five-11ths, and the United States--five-12ths. One should also keep in mind that because of the country's population growth the amount of

plowed land per one resident has decreased during the past 20 years from one to 0.83 hectares and the possibilities of considerably increasing the area of plowed land are now limited.¹⁰

The totality of these and other objective factors brings about a need for a considerable increase in the fertility of the soil and a higher overall technical level of agricultural production. In keeping with the Food Program the kolkhozes and sovkhozes of the country have been given the task of increasing the production of agricultural products from one hectare of agricultural land by no less than one-third during the decade (1981-1990) and increasing labor productivity about 1.5-fold.

It is possible to carry out this task primarily through efficient utilization of land resources. In agriculture, as a rule, the economic process of reproduction is interwoven with the natural process. The effectiveness of the branches of crop growing, animal husbandry and the enterprise as a whole depends on a complex of agrotechnical, zootechnical and other measures which were developed taking into account the local peculiarities of production; their fulfillment is strictly mandatory. Only in this case is it possible to achieve the desired result and to utilize labor and material resources more fully. "The productivity of agricultural labor," wrote K. Marx, "is linked to the natural conditions and, depending on the productivity of the latter, one and the same quantity of labor can be represented by a greater or lesser quantity of products or consumer values."¹¹

Success in the matter is provided by a deep knowledge of production, a creative approach on the part of the managers, specialists and all workers of the kolkhozes and sovkhozes toward the development of various measures, and their implementation taking natural and other factors into account as much as possible. K. A. Timiryazev emphasized that "nowhere, perhaps, in no other activity is it necessary to weigh so many various conditions for success, nowhere is so much multifaceted information required, nowhere does a one-sided point of view lead to such great failure as in agriculture."¹²

Providing for the interconnection and the inseparable unity of the complex of factors that influence the harvest when developing and realizing zonal systems of farming is one of the major conditions for increasing the economic productivity of the soil. Of special importance is a correct combination of mechanization and chemization of agricultural production. "Although fertility is an objective property of the soil," wrote K. Marx, "economically it still always means a certain relationship--a relationship to a given level of development of chemical and mechanical means of agriculture, and therefore it changes along with this level."¹³

Providing agriculture with technical equipment and raising the level of mechanization of production processes contributes to reducing the time periods for conducting technological operations, improving the air and heat conditions of the soil and considerably increasing labor productivity. Mineral fertilizers and other chemical preparations that are applied to the soil enrich it with the necessary nutritive substances and improve the structure, and as a result more favorable conditions are created for growing plants.

As for the influence of these factors on the final results of the economic activity of the enterprises, as a result of the first of these--mechanization--one achieves first and foremost a savings on live labor and an increase in its productivity in the intermediate stages of the process of production; as a result of the second--chemization in combination with other agricultural devices--increased fertility of the soil and the provision of most of the additional yield.

In 1983 on an average for the country for one hectare of plowed land we applied 102.5 kilograms of mineral fertilizers as compared to 12.2 kilograms in 1960 (translated into 100 percent nutritive substances).¹⁴ But the need of the farms for these is far from being fully satisfied. In keeping with the Food Program in 1985 26.5 million tons of mineral fertilizers will be delivered and in 1990--30-32 million as compared to 18.8 million in 1980. Here it is important to achieve optimal proportions both in the production and in the deliveries to agriculture of individual kinds of mineral fertilizers--nitrogen, phosphorus and potassium (in terms of the availability of nutritive substances in them). In 1983 the kolkhozes, sovkhozes and other agricultural enterprises received these fertilizers in a ratio of 1.0:0.63:0.60 while at the same time, according to data from scientific institutions, it should have been 1.0:1.0:0.8.

At the same time an exceptionally great amount of significance is attached to the application of organic fertilizers (by 1990 their deliveries should increase to no less than 1.5 billion tons), liming acid soils and expanding the production and utilizing peat and manure composts.

A large amount of harm is caused to agriculture by weeds, diseases and pests of plants. Therefore increasing the production and extensively introducing chemical means of plant protection is now acquiring exceptional significance. It has been calculated that each ruble spent on chemical measures to fight against this protects products worth a considerably larger amount, namely: grain--10 rubles, raw cotton--10 rubles, potatoes--24 rubles, and fruits and berries--30 rubles. The value of the agricultural products obtained as a result of measures for plant protection under the 10th Five-Year Plan amounted to 5.5-6 billion rubles a year.¹⁵

The volume of deliveries of chemical means of plant protection to the country's agriculture is increasing from year to year. Thus in keeping with the Food Program in 1985 their quality (translated into active substance) is to increase to 680,000 tons and in 1990--to 750,000-790,000 tons as compared to 305,000 tons in 1982. Moreover the needs of the kolkhozes and sovkhozes for herbicides will be fully satisfied. These are necessary for introducing industrial technologies for cultivating agricultural crops.

A great deal of attention should be given to expansion of the assortment and improvement of the quality of mineral fertilizers and increasing their content of nutritive substances. In 1990 the production of highly concentrated and complex fertilizers will amount to no less than 90 percent of the overall volume of them. All of them (with the exception of phosphorite meal) will be produced only in granulated or large crystal form. There will be a considerable expansion of the production of liquid compound fertilizers and

highly effective means of plant protection, and the deliveries of chemical feed supplements and concentrated feeds to agriculture will increase significantly.

In addition to this measures have been earmarked for creating the necessary material and technical base for chemization on the kolkhozes, sovkhozes and organizations of Selkhozknimiya. It has been earmarked to construct warehouses, points for technical servicing of machines, takeoff and landing strips, manure storage facilities and other facilities so as to maximally reduce the losses of chemical products during transportation, storage and application to the soil.

From the standpoint of protecting the environment it is exceptionally important to have extensive application of biological methods of plant protection, intelligent scientifically substantiated utilization kinds of chemical means, strict observance and complete fulfillment of the rules of agrotechnology for raising agricultural crops, a sharp rise in the overall level of farming, and the input vision of the proper order on the fields.

An important role in the intensification of the production of agricultural products is assigned to land reclamation. The kolkhozes and sovkhozes are carrying out a broad program of land reclamation work in order to obtain large and stable yields of grain and other agricultural crops. In addition to this they are carrying out a basic improvement of the meadows and pastures, liming acid soils and other measures that contribute to more productive utilization of land.

At the present time the overall area of reclaimed land amounts to 33 million hectares, including 19 million hectares of irrigated land and 14 million hectares of grained land. At the October (1984) CPSU Central Committee it was noted that on this land they obtain 33 percent of the crop-growing products; on irrigated land they cultivate all of the rice and cotton, 75 percent of the vegetables and 50 percent of the fruits and grapes.

In keeping with the decree of the CPSU Central Committee and the USSR Council of Ministers, "On the Long-Term Program for Land Reclamation and Increasing the Effectiveness of the Utilization of Reclaimed Land for Purposes of Steadily Increasing the Country's Food Supply," it was intended to increase the area of irrigated land in the country to 30-32 million hectares by the year 2000, and the area of drained land--to 19-21 million hectares. It is planned to increase grain production on this land to 55-60 million tons, including corn--to 18-20 million tons, and feeds--to 115-120 million feed units.

In order to obtain the planned volumes of agricultural products it is intended to carry out a large range of measures related to more effective utilization of reclaimed land, a higher level of construction of facilities for land reclamation, active introduction of the achievements of science and practice and increased productivity and stability of agricultural production.

It becomes very important to strengthen the production ties of the kolkhozes and sovkhozes with enterprises and organizations which serve agriculture. In

the decree of the CPSU Central Committee and the USSR Council of Ministers, "On Improving Economic Relations Between Agriculture and Other Branches of the National Economy" (1983), it is envisioned that there be increased responsibility on the part of enterprises and organizations that serve the kolkhozes and sovkhozes for increasing the production and procurements of agricultural products and for the quality and time periods for performing work and rendering services; that they have greater motivation to achieve high final results and increased economic effectiveness of agricultural production; that they implement measures for ensuring stable economic conditions for expanded reproduction on the kolkhozes and sovkhozes; that the present policy for planning and utilizing the profit of the enterprises and organizations that serve agriculture be changed.

When evaluating the activity of the enterprises and organizations of Goskomselkhoztekhnika, Soyuzselkhozkhimiya and the USSR Ministry of Water Management that serve the kolkhozes and sovkhozes and also when forming their material incentive funds and bonuses, as the main indicators they will take into account the increase in the production of agricultural products on the farms they serve, the fulfillment of contractual commitments, the reduction of the cost of work and services, and for the procurement enterprises and organizations--the fulfillment of procurements of products.

It is noted in the decree that with fulfillment by the rayon (interrayon) production associations and divisions of Selkhozkhimiya and Selkhoztekhnika of the work for comprehensive technical servicing of the machine and tractor fleet of the kolkhozes and sovkhozes and agrochemical treatment of the land the accounts between them and the farms are kept within annual limits approved by the rayon agroindustrial associations on the basis of planning normative expenditures, which should not exceed the proportional actual expenditures of the given farms for this kind of work on an average for the 3 preceding years. If the actual cost of the work and services for the repair and technical servicing of tractors, trucks, and agricultural machines and equipment, and comprehensive agrochemical treatment of the land turned out to be higher than the established annual limits, the sum by which it exceeds the planned amount is included in the results of the economic activity of Selkhoztekhnika and Selkhozkhimiya.

The rayon (interrayon) production associations and divisions of Selkhoztekhnika and Selkhozkhimiya, the water management and repair and operations organizations as well as the rayon poliv production associations return to the kolkhozes and sovkhozes 50 percent of the above-plan profit from activity for servicing them in proportion to the volumes of work performed in value terms.

In the party document a great deal of attention is devoted to the quality of technical service for agriculture. In particular it points out that elimination of the shortcomings revealed during the course of warranty repair on tractors, trucks, agricultural machinery and equipment which is done by the kolkhoz and sovkhoz should be carried out by the rayon production associations and divisions of Selkhoztekhnika. Imperfections revealed during the course of warranty repair in the water management and land reclamation network, will be eliminated by the water management organizations at their own expense.

The enterprises that manufacture tractors, trucks, and agricultural machines and equipment must, within a month after the day they receive the document for the inspection of the quality of machines and equipment which they have delivered but which have broken down within the warranty period, send to the Selkhoztekhnika division the sets of equipment, components and parts to replace the ones that have broken. The manufacturing enterprises reimburse Selkhoztekhnika for expenditures on the repair of machines that have broken down during the warranty period.

It has been envisioned that reports be introduced into practice for managers of enterprises and organizations that serve agriculture to be given at meetings of kolkhozes and production conferences of sovkhozes concerning the fulfillment of contractual commitments.

The interests of the matter require a considerable improvement in the conditions for the labor and life of agricultural workers. As we know, a large amount of work is being done in this area. But the social and domestic service for the rural population still falls below modern requirements. One of the important issues which needs to be resolved at accelerated rates is the construction of good housing in rural areas. Here the residential buildings should have all of the conveniences, garden plots and outbuildings. It is also necessary to improve the consumer services, trade and medical and transportation service for the population. The implementation of this program will make it possible to reduce the outflow and stabilize the population of working age in rural areas and create the necessary prerequisites and possibilities for augmenting the labor resources in rural areas with youth, and it will contribute to retaining skilled personnel on the kolkhozes and sovkhozes.

Thus even a brief consideration of the various aspects of the material and technical support for the Food Program shows the complexity of the problem, the importance of a comprehensive solution to it and the need for help for the APK from the entire national economy. Carrying out the tasks set by the CPSU will be a solid basis for increasing the effectiveness of the material and technical support for agriculture and increasing the food supply.

FOOTNOTES

1. The USSR Food Program for the Period Up to 1990 and Measures for Its Implementation, Materials of the May 1982 Plenum of the CPSU Central Committee, Moscow, Politizdat, 1982, pp 9, 16.
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4. The USSR National Economy in 1983, Statistical Annual, Moscow, Finansy i Statistika, 1984, pp 196, 197, 198.
5. EKONOMIKA SELSKOGO KHOZYAYSTVA, 1984, No 4, p 36.

6. EKONOMIKA SELSKOGO KHOZYAYSTVA, 1979, No 4, p 87.
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12. Timiryazev, K. A., "Soch." [Works], Vol 3, p 71.
13. Marx, K. and Engels, F. "Soch.," Edition 2, Vol 25, part II, p 202.
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AGRO-ECONOMICS AND ORGANIZATION

PROGRESS, POTENTIAL OF KAZAKH PRIVATE PLOTS SUBSIDIARY FARMS

Alma-Ata NARODNOYE KHOZYAYSTVO KAZAKHSTANA in Russian No 7, Jul 85 pp 41-45

[Article by L. Pyatkov, chief, Forestry and Agriculture Department, Kazakh SSR Gosplan: "Agro-Shops and Small Household Plots -- An Important Support"]

[Text] Subsidiary agriculture at industrial enterprises, organizations and institutions and the population's private farms play a major role in the further advancement of agriculture and the development of the agro-industrial complex as a whole. They make quite a substantial contribution to meat, milk potato, fruit and vegetable production. It is no accident that the Food Program stresses that every enterprise capable of operating such farms should, as a rule, do so. It is also necessary to create conditions so that each family living in the countryside can have a private plot and keep livestock and poultry.

Over recent years much has been done in our republic to organize and develop subsidiary agriculture at enterprises, organizations and institutions.

On 1 January of this year there were 1,244 such farms in Kazakhstan. They had 1,704,000 hectares of land, 3,961 tractors, 1,024 grain combines and 1,167 trucks.

About 45 million rubles in capital investments were allocated to the development of subsidiary farms in 1984. In essence, subsidiary farms are the agricultural shops of enterprises, which supply these farms with the necessary equipment, raw and other materials, transportation, build various structures, provide help in the repair of agricultural and other equipment, allocate labor power for the preparation of feeds and during harvest and use enterprise material incentives funds to award the better workers at such farms.

In turn the agro-shops help improve public food service and supply plant cafeterias with products. Thus, subsidiary enterprises combine industrial and agricultural production.

Back in 1979 the CPSU Central Committee and the USSR Council of Ministers passed the decree "On Subsidiary Farms at Enterprises Organizations and Institutions" which provides for a set of measures to further develop this

form of farming, making it possible to substantially supplement the country's food balance.

At the beginning of this year subsidiary farms in the republic had 74,000 head of cattle, including almost 18,000 cows, more than 192,000 sheep and goats, 155,000 pigs and 15,200 horses. Many farms are raising poultry, rabbits and bees. In the four years of the current five-year plan subsidiary farms produced more than 259,200 tons of grain, about 105,000 tons of potatoes and vegetables, 92,700 tons of meat (live weight), 33,100 tons of milk, approximately 20.2 million eggs and many other products. All these items arrived at workers' cafeterias to supplement allocated food stocks. This proves that agro-shops are a big support to the public table.

The creation of subsidiary farms at industrial enterprises is also economically advisable because there are people working in them who, for various reasons, cannot move to large sovkhozes or kolkhozes. Also, it is advantageous for the farms to avoid difficulties by shifting them to subsidiary farms.

Agro-shops can be specialized or diversified individual animal farms or greenhouses. The latter forms are possible for practically every enterprise, institution or school.

Kazmintsvetmet [Kazakh SSR Ministry of Nonferrous Metallurgy] has positive experiences in setting up large subsidiary farms. In this system there are 30 agro-shops at enterprises. They have 250,000 hectares of agricultural land, more than 9,000 cattle, 12,000 pigs, about 16,300 sheep, while many farms raise poultry, have fish ponds and keep bees. Such rural shops annually produce up to 2,000 tons of meat and 2,500 tons of milk. Eggs, honey, potatoes and produce are supplied to workers' cafeterias. The agro-shop at the Kazzoloto produces almost 35 kilograms of meat, 87 liters of milk and sizable quantities of produce per worker.

The ministry gives great attention to developing this form of production. The needed resources are annually allocated to strengthening the material-technical base and to constructing production facilities and housing.

Thus, in 1983, 4,985,000 rubles in capital investments were used, while in 1984 the figure was 7,721,000. In 1983, 4 rabbit warrens for 500 head, 4 goat pens for 3,000 head, 5 pig pens for 1,550 head, 6 calf pens for 1,200 head, 3 feed shops, grain storage facilities for 500 tons, a 1,800 square meter greenhouse and a water reservoir were put into operation.

Good living conditions are being arranged for subsidiary farm workers: water supply systems have been installed, 2,600 square meters of housing built and a total of 100 kilometers of roads and power lines constructed.

The equipment levels at agro-shops are also improving. At the end of 1984 they had 278 tractors of various kind (an average of 10 per farm), 86 grain combines, and 119 trucks.

These resources bring a substantial return. In 1984 republic Ministry of Nonferrous Metallurgy earnings from the sales of subsidiary farm output were more than 3 million rubles.

Railroad workers and truck drivers in the republic are setting good examples for subsidiary farm organization. In 1984 the subsidiary farm at the Shemonaikhinskiy Trucking Enterprise produced more than 20 kilograms of meat and 430 liters of milk per worker.

The Karaganda Coal Association is serious about supplementing its food resources. The agro-shop in the Karaganda Coal Basin is deservedly considered one of the best in the republic. Each year ever greater amounts of meat, milk eggs and produce are delivered to miners' tables. During the current five-year plan miners increased the number of cattle at their subsidiary farms almost six fold and the number of pigs two fold. Meat production was increased to 250-260 tons, milk to 700 tons, eggs to 2 million, vegetable and potato production to 250 tons.

The agro-shop at the Kargalinskiy Cloth Combine gathers strength yearly. It has a very diverse output: beef, pork, milk, honey, fruit and vegetables. In the winter, onions, parsley and dill often arrive from greenhouses.

Not far from Aktyubinsk is a settlement with comfortable farmstead type homes and other structures. This is the subsidiary farm of the Aktyubinsk Farm Machinery Plant. It has buildings for feeding cattle and sheep. These are equipped with modern machinery and lines for preparing and delivering feed, and for cleaning. The complexes are designed to produce up to 4,000 tons of meat and 6,500 tons of milk. The farm is also mastering the production of kumiss and shubat.

For several years Kazpotrebsoyuz [Kazakh Consumers Union] has been actively developing subsidiary farms. While in 1980 there were only 13, there are now 180 such farms. Three hundred feedlots have been set up, many of which are quite large. Thus, the Kazkelenskiy cattle feeding complex has good facilities, a feed shop, and sufficient equipment for mechanizing laborious processes. It has a slaughter house and a processing shop to produce sausage and other items for the Kooperator Store in the capital.

During 3 years of the 11th Five-Year Plan Kazakpotrebsoyuz rebuilt and built, using its own resources, 125 cattle barns (for 21,000 head), 85 sheep pens (for 58,000 head) 100 pig pens (19,700 head), and 16 poultry houses (for 219,000 head).

The consumer cooperative's subsidiary farms have 580 tractors, 77 grain combines, 249 tractor trailers, 107 trucks, and several other kinds of farm machinery. They have over 369,000 hectares of agricultural land, including 16,400 hectares of arable land., 18,000 hectares of hayfields and 334,600 hectares of pasture. As there is not enough tillable land, all kinds of parcels are used. Skillful agronomy makes it possible to obtain fairly good results from such land. Subsidiary farms thus produce their own feeds, making it possible for them to increase their herds.

As of 1 January 1985, Kakpotrebsoyuz subsidiary farms had 10,662 cattle, 21,502 pigs, 41,259 sheep and goats and 79,170 head of poultry.

The cooperative farmers are also growing potatoes, vegetables and melons. The results are noticeable -- 891 tons of potatoes have already reached the public's tables.

Nevertheless, in spite of definite successes in the development of agro-shops, there are also several factors hindering this important matter. First of all, a large number of subsidiary farms do not have enough land to support their own feed base. Frequently the parcels allocated require large capital investments for improvement. In addition to resources, the proper equipment is also necessary. The enterprises do not have it.

Agro-shops also lack equipment, spare parts, repair materials, fuel, lubricants, seeds and fertilizers. These farms are also poorly supplied with young cattle and poultry.

USSR Gosplan is authorized to grant cooperators up to 10 year credits for building and expanding mass consumption goods enterprises, feeding and subsidiary farms. The implementation of this decision requires initiative, a real and not simply an apparent desire to utilize these possibilities.

The consumer cooperative has another important task, to annually procure large amounts of agricultural products from the public at contract prices and to sell them on commission through its own network.

The purchases of surplus animal and plant products from the public are growing steadily. This not only helps increase the public's income and welfare, but also promotes the stable development of consumer cooperative retail trade. Most importantly, it supplements the country's food balance.

To complete these tasks, each procurement worker should set to the fulfillment of contracts for the purchase and sale of agricultural products in the full assortment and quality. Great possibilities are opened to cooperators by the CPSU Central Committee and USSR Council of Ministers decree "On Additional Measures for Expanding Kolkhoz, Sovkhoz and other Agricultural Enterprise Sales of Produce to Consumer Cooperatives and at Kolkhoz Markets."

A well prepared material and technical base is one of the most important factors in its implementation. True, consumer cooperatives have reception-procurement and pickling-salting points and storage facilities for potatoes and produce but they are clearly insufficient. Seasonal reception points for vegetables, melons, fruits, berries, mushrooms and other agricultural products should be opened everywhere. It would not be bad to use stores and public food service enterprises for these purposes. The advantages would be mutual.

Obviously, the organization of agro-shops and improvements in their activities are something new and are not easy. Take the cadre question. Labor at subsidiary farms is organized on the same principles as at state agricultural enterprises. The same production units, mechanized links, brigades and sections are set up within collectives. They all require qualified leadership.

Agro-shops should be led by skilled specialists, possessing knowledge about agriculture and experienced in working with people. Agro-shops need agronomists, zootechnicians, engineers and economists. Perhaps the most serious impediment is the shortage of such specialists. This is because cadre for subsidiary units, combining agricultural and factory conditions, are not being trained anywhere.

When talking about ways to supplement food resources, one cannot forget the role of private plots of rural workers and urban dwellers. In Kazakhstan almost 2.5 million families have private subsidiary farms totalling more than 250,000 hectares of agricultural land. Farmstead and orchard-garden plots are kept by 94.4 percent of kolkhoz families, 63.9 percent of worker and employee families living in rural localities and 26 percent of the families of workers and employees living in cities and urban type settlements.

At the beginning of 1985 there were 2,308,000 cattle on private plots. This includes 1,225,000 cows. There were also 4,256,000 sheep and goats, 159,000 pigs, more than 400,000 horses and camels, 18,985,000 head of poultry and 114,000 bee colonies. This sector produces 30 percent of the meat, 44 percent of the milk, 34 percent of the eggs, 48 percent of the potatoes and vegetables, 61 percent of the fruits and berries, 37 percent of the melons and 18 percent of the grapes produced in the republic.

In evaluating the economic significance of peasant farms or urban dwellers' orchards and gardens, one should stress that during the 10th Five-Year Plan they accounted for more than one-fifth of the value of agriculture's gross output. They supply about 32 percent of the republic's population with various types of agricultural products, thus freeing quite large state resources, both material and labor.

It is the Soviet people's constitutional right to conduct private farming operations, including the keeping of livestock and poultry. In Article 13 of the USSR Constitution it is written that the state and kolkhozes will assist citizens in their work on subsidiary operations. Soviet legislation protects citizens' private property and gives all kinds of assistance to the development of this form of farming on state land.

The party and government show great concern about rural dwellers' private plots. There is no single formula on how to conduct operations: should sovkhoz calves be fed so that they can later be sold to the farm, surplus milk sold to procurers, or ducks, vegetables, or potatoes raised?

Of course, there are problems here. For example, free pasture land cannot always be allocated for livestock, but if they want to, farms can nevertheless find a solution by supplying feed to privately owned livestock.

Sovkhozes and kolkhozes are obligated to help rural dwellers by supplying young livestock. During 4 years of the current five-year plan the population was sold 1,534,800 piglets and more than 129.7 million youngbirds. However, this was insufficient.

Local soviet and agricultural organs, trade union organizations and kolkhoz and sovkhoz managers should do more extensive organizational and educational work, helping to see that every rural family have a garden, livestock and poultry and that more families, especially young ones, are supplied with cows and other livestock.

In order to acquire cows and calves the public is annually allocated more than 2 million rubles of 1 year credits from USSR Gosbank and about 5 million rubles in long term loans to build garden sheds and to improve plots at collective garden societies.

The population sells surplus agricultural products to procurement organizations. During 1981-1984 average annual purchases of all types of products from the public were: livestock and poultry -- 96,000 tons, milk -- 215,000 tons, potatoes -- 74,000 tons, produce -- 82,000 tons, and many other products.

This truly shows that small household plots are an important support.

However, we should not forget a very important facet of this matter: private subsidiary farms are of an auxiliary nature, they should not become the main source of living for able-bodied citizens. Unfortunately, practical experience shows negative examples of gardeners being transformed into out-and-out speculators. It is necessary to decisively struggle against such "fulfillers" of the Food Program and curtail their sources of income.

Recently, directive documents have been approved which outline additional measures to increase agricultural production by citizens private farms. It is recommended that sovkhozes, kolkhozes and other agricultural enterprises sign, on a strictly voluntary basis, contracts with citizens to raise and sell livestock, poultry and surplus milk to these enterprises. It has been established that families of kolkhoz farmers, workers, employees and other citizens can privately own more livestock than previously set by the norms. Livestock, poultry and surplus milk purchased by kolkhozes and sovkhozes through contracts with citizens are included in the indicators of agricultural enterprises. One is completely right in saying that this is a new form of combining public production with subsidiary private farms.

These measures are to support the growth and strengthening of private subsidiary farms and include the following: the creation of the material and moral conditions for increasing citizens' interest in operating subsidiary farms, the assurance of the more complete use of farmstead and other land sometimes not used by farms, such land is to be used for private subsidiary farms; assistance to citizens in the construction of private houses, garden sheds and farm structures; a assistance from agricultural enterprises through expanded sales of young livestock, poultry and rabbits to citizens to raise, the allocation of land to raise feed, the plowing of farmstead plots, etc; the organization and improvement of production services to private subsidiary farms by units of Goskomselkhoztekhnika and the Ministry of Consumer Services; increases in the production and public sales of small scale equipment, timber, bricks, gravel, sand and other local building materials, orchard seed stock

for fruit and berry crops, grapes, seeds and seedlings of vegetable and orchard crops, mineral fertilizers and chemical poisons in packaged form; improvements in consumer cooperative purchases of plant and animal products from private plots at contracted prices; and the expansion and strengthening of the material base for kolkhoz markets in order to provide citizens with the conditions necessary for selling their surplus agricultural products.

Kolkhoz farmers, workers and employees desiring to purchase cows and other livestock are given up to 500 rubles credit for purchasing cows and up to 250 rubles for purchasing calves. Sovkhozes and other enterprises are authorized, upon agreement with the trade union committee, to pay off up to 50 percent of these credits using resources from the economic stimulation fund for workers and employees honestly working at these enterprises. This also applies to teachers and doctors working and living at these enterprises and to pensioners who worked for long periods at these enterprises.

In order to develop private subsidiary farms rabbit raising, kolkhozes, sovkhozes and other agricultural enterprises are authorized to raise breedstock rabbits in quantities necessary to meet citizens' requirements. As a rule, consumer cooperatives should purchase rabbits and rabbit skins directly at the sites where they are raised.

The most substantial problem in the organization of private subsidiary farms is feed supply for privately owned livestock. This includes hay fields, pastures, succulent and coarse feeds, grain feeds, and mixed feeds. In actuality these problems are being solved very slowly. Directive documents state the following:

Kolkhoz farmers, workers, employees and other citizens honestly participating in public production, and pensioners keeping cattle, sheep and goats on private plots are granted parcels of land for cutting hay and for feeding animals. It is authorized to use, in the established procedure, agricultural lands of kolkhozes and sovkhozes, land in state reserves and state forestry lands and lands of industrial, transport and other nonagricultural enterprises and organizations. That is, if documents are properly filled out, it is possible to use practically all land which is suitable for such purposes.

Also, a procedure has now been established under which kolkhozes, sovkhozes and other agricultural enterprises can give kolkhoz farmers, workers and other citizens who have signed contracts for animal product production with such farms or with consumer cooperatives, additional parcels of farmstead land, or, when necessary, land temporarily unutilized by farms so that these individuals can raise feed crops.

Kolkhozes and state farms are obligated to give kolkhoz farmers, workers, employees and other citizens assistance, equipment, transport and seed materials for raising feed crops on farmstead and other lands.

During the feed preparation period farms should also take measures to provide rural dwellers with feeds for private livestock. Farms have been authorized to sell for feed up to 3 percent of the gross harvest of grain, but not more than 2 quintals per permanent worker or pensioner annually.

Time has shown the correctness of this course for developing agro-shops and citizens private plots. However, often not everyone can correctly define the essence of subsidiary private farms. What is this essence?

A private subsidiary farm is a farm [khozyaystvo], and private [lichnoye] and subsidiary [podsobnoye]. It is private because everything on it (livestock, structures, and others) is the private property of a citizen. It is subsidiary because it is not fundamental, as citizens obtain their main income from labor activities, while they only obtain additional income from the subsidiary farm. Finally, a private subsidiary farm is a farm consisting of the totality of different facilities making it possible for citizens to raise any agricultural product, livestock or poultry.

Most important is land. Then follows the home, farm structures, livestock, poultry, objects of everyday use and personal consumption.

As is known, land is exclusively the property of the state and is granted to citizens only for use. For stability in land use, agricultural land, including farmstead parcels, is granted without time limit to citizens for private farming.

Land for collective orchards is also granted without time limits, while that granted for collective gardening has time limits.

Thus, a citizen has the right to farm on the land granted in accordance with its functions. For example, land granted for collective gardening can be used only for growing vegetables, potatoes and melons. It is forbidden to erect structures or to plant berries or fruit trees on it.

Farmstead parcels in rural localities and areas around houses in cities and urban type settlements can be used in the established procedure for gardens, orchards, planting agricultural crops, raising livestock and poultry, building houses, farm structures and other installations.

The size of the parcels for various citizens-land users and the norms for keeping livestock and poultry are determined by legislation, and for kolkhoz members by the kolkhoz charter. While there are norms for keeping livestock, pigs, sheep, goats, horses and camels, there are no restrictions for poultry, bees and rabbits.

Some economists have long asserted that citizens' private subsidiary farms are only of a temporary nature, and that they will exist only until public production completely meets the public's requirements for foodstuffs. However, life has refuted these armchair conclusions. Peasants have and will always work the land, raise potatoes, fruit and vegetables. Moreover, the farmstead is an orphan without livestock and poultry.

It is also necessary to keep in mind the importance of private plots for giving young people respect for agricultural labor and in helping them select a profession.

In conclusion I would like to make one concrete proposal.

Organization is an important facet in a comprehensive solution to problems of agro-shops and private subsidiary farms. It is becoming increasingly obvious that each sovkhoz or kolkhoz needs a deputy director or deputy chairman for questions concerning private subsidiary operations. At the disposal of this office should be transport equipment, feed, tractors and farm machinery. This person is obligated to be concerned about selling surplus products and organizing zootechnical and veterinary. The time has come to put agro-shops and rural dwellers private plots on a businesslike basis.

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TILLING AND CROPPING TECHNOLOGY

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INCREASE IN ORGANIC FERTILIZER APPLICATION IN RSFSR DISCUSSED

Moscow ZEMLEDELIYE in Russian No 8, Aug 85 pp 27-28

[Article by V. A. Svetov, deputy chairman of Rosselkhozkhimiya [Russian Agricultural Chemical Association] and candidate of agricultural sciences: "The Use of Organic Fertilizers--The Most Important Means for Comprehensively Cultivating the Soil"]

[Text] In recent years the kolkhozes and sovkhozes of the RSFSR have carried out a considerable amount of work on the effective use of the means of chemicalization and on increasing return for their use. With an increase in the delivery of mineral fertilizers there is an increase in the norm for fertilizer application into the soil, in the role of comprehensive agrochemical cultivation of fields and in the productivity of crops being cultivated. In 1984 the delivery of mineral fertilizers reached 88 kilograms of active substance per hectare of plowland; the area of acidic soil that is limed and the area of solonets soil that is subject to chemical reclamation have increased.

In comparison to the Ninth Five-Year Plan, on the average per year the volume of applications of organic fertilizer into the soil almost doubled. Last year an average of 3.7 tons were applied per hectare of arable land, as compared to 1.8 and 2.7 tons during the ninth and 10th five-year plans.

All of this enabled us to decrease the area of acidic soils and to raise the content in them of active forms of phosphorus and exchange potassium. During the last 12 years alone the area of arable land with a low and very low phosphorus content has decreased by 12 million hectares and with a low potassium content--by 6 million hectares.

However, it should be noted that the effectiveness of the means of mechanization still has not reached a sufficiently high level. One of the reasons for this is the violation of the requirements of the zonal farming system and the non-comprehensive approach to the use of fertilizers, chemical reclamation agents and the means of plant protection.

Within the practice of farming there are frequent violations of well-known farming laws of the minimum and of the equal significance of factors, in accordance with which productivity is determined not according to the total of

all elements existing in the soil but according to that element which is contained in the minimal amount.

The effectiveness of these laws is indisputably confirmed by the practice of chemicalization. The application of large doses of mineral fertilizers on acidic soils does not yield an increase in yield without the application of lime; the return on mineral fertilizers is also low when there is a shortage of organic substance in the soil. The same can be said about active phosphorus, exchange potassium and microelements. Each of the basic nutritional elements achieves the maximal effect only if it is applied into the soil in a complex with other elements in the proper ratio, which has been calculated for the planned yield of the crops used in the crop rotation as well as in conjunction with other agricultural methods.

Thus, both the theory and practice of agrochemistry insistently dictated the necessity of overall agrochemical field cultivation (KAKhOP), which achieves the most effective utilization of fertilizers.

In the RSFSR the KAKhOP method has been introduced on a planned basis since 1981. With each passing year the volume of agrochemical field cultivation increases, and by the end of the current year it will have reached 3.05 million hectares; the general volume of comprehensively agrochemically-cultivated fields will surpass 9 million hectares.

In 1982-1984 after the implementation of full-scale agrochemical cultivation the average productivity of winter rye in the RSFSR on cultivated fields increased by 29 percent, of winter wheat--by 39 percent, of spring wheat--by 46 percent and of potatoes--by 29 percent in comparison to plots where work was not carried out comprehensively. It should be noted that the effectiveness of KAKhOP manifests itself over the long-term. Thus, in many enterprises of Voronezh, Vladimir, Lipetsk and Sverdlov oblasts, Krasnodar Kray and the Tatar and Mordovian ASSR's the yield of the second crop increased by 30-50 percent, and of the third crop--by 25-40 percent. In general expenditures for the use of the means of chemicalization with comprehensive agricultural field cultivation are reimbursed by 50 percent during the first year of use, and expenditures ascribed to the first crop--fully.

Within the system of comprehensive agrochemical field cultivation organic fertilizer is the most important and at the same time for most zones in the republic the most limiting factor in the expansion of this work.

In the RSFSR as a whole each year no fewer than 800 million tons of manure and compost must be applied to the soil in order to create a non-deficit balance of humus, but in fact annual output of manure and compost does not exceed 550 million tons.

The most unfavorable situation involving organic fertilizer resources is developing in the oblasts, krays and autonomous republics of the Central Chernozem, Transvolga, Northern Caucasus, Western Siberian and Eastern Siberian economic regions and in a number of other places. Thus it is no accident that during the last 15-20 years the humus content in the soil in the Northern Caucasus region, according to data from subdivisions of the All-

Russian association, Roszemproyekt [All-Russian Land Planning Association], has decreased by 0.4 percent, in the Transvolga region--by 0.32-0.45 percent, in the Western Siberian region--by 0.42 percent, in the Eastern Siberian and Far Eastern regions--by over 0.50 percent and in the Non-Chernozem Zone--by 0.51 percent. In the Non-Chernozem Zone of the RSFSR now 15 percent of arable soil has a humus content of less than 1 percent, and the overwhelming majority of the soil--1-2 percent.

In connection with the situation that has developed, the RSFSR Minselkhoz [Ministry of Agriculture], the RSFSR Minplodoovoshchikhoz [Ministry of the Fruit and Vegetable Industry] and the Rosselkhozhimiya association are now carrying out significant work to increase the volume of stockpiles and the use of organic fertilizers.

Thanks to the measures that have been taken, the enterprises of 18 oblasts, krays and ASSR's are applying over 8 tons of organic fertilizer per hectare, which has enabled them to create a non-deficit humus balance in the soil.

Within the total balance of nutritive substances applied to the soil in the RSFSR, almost one-third consists of manure and compost.

At the same time, in the past year the kolkhozes and sovkhozes of Kirov Oblast curtailed the volume of shipments of organic fertilizers as compared to the levels achieved during the 10th Five-Year Plan. The pace of utilizing organic fertilizers is increasing slowly in Kalinin, Novosibirsk, Pskov and Amur oblasts and in the Bashkir, Buryat and Udmurt ASSR's.

This is no accident. In these oblasts the volume of deliveries of organic fertilizers into the fields increased while transitional reserves from past years have decreased sharply, which is hindering growth in the volume of annual use of these fertilizers.

For this reason, in many oblasts, krays and autonomous republics extensive work has begun to find additional reserves for producing organic fertilizers and for their more effective accumulation and use.

In Moscow, Leningrad, Vologda, Yaroslavl, Tomsk and Tyumen oblasts the problem of preparing peat-dung and peat-manure composts is being dealt with successfully.

Questions on improving the quality of organic fertilizers are being solved successfully.

The RSFSR Ministry of Agriculture has developed principled approaches to the organization of compost production on an industrial basis; forms of economic relations have been determined for those who produce organic fertilizer and for those who utilize it.

An improvement in the quality of organic fertilizers depends to a decisive degree on the technology for preparing it. Under present-day conditions the most effective technology is that of mixing manure and dung with peat in manure storage facilities, shops and on composting platforms with subsequent

delivery of this mixture to the edges of fields, where the compost undergoes artificial ripening in pits. It is then applied to fallow fields or late-fall plowed fields in the course of comprehensive agrochemical field cultivation. Artificial ripening of compost may be carried out in manure storage facilities as well. At the present time a technology for the field preparation of compost is also being used; in this case the peat and manure are taken to field edges, where they are mixed and artificially ripened in heaps. It should be emphasized that the field preparation of compost is recommended in places where peat is unavailable--straw, defecation mud, soil and waste products from industrial enterprises can be used in its stead.

Field composting of course does not preclude compost preparation under stationary conditions. But it should be said outright that the technology for preparing full-value compost still has not been fully developed. The bulldozer method does not achieve the mixing of good-quality compost, yet there is practically no other production technology for this purpose. The necessary selection of production equipment is also absent for the preparation of composts in composting shops.

Agricultural workers understand well that by means of manure, peat, bird droppings and straw alone the problem of supplying the soil with organic substances will not be solved. First of all, we must utilize municipal wastes, lignin, tree bark and other organic wastes from industry as organic fertilizer; secondly, we must utilize green manure crops.

It is essential to place the utilization of sown green fertilizers on a plan basis, and to establish plans for the sowing of green manure crops for every oblast, kray and ASSR. After all, in the Tatar ASSR workers were able to come to a solution of the problem in a statesman-like manner. Even under the condition that developed last year, green manure crops were cultivated and plowed under here on an area of 34,000 hectares.

In the RSFSR a purposeful, comprehensive program has been developed for the production and use of organic fertilizers in the period to 1990. In it great significance is attached to the question of producing green manure crops.

A great deal still remains to be done in the republic's kolkhozes and sovkhozes to bring order to work with organic fertilizers. In a number of places low-quality preparation of organic fertilizer and the use of peat in pure form are tolerated. Frequently manure is taken into the fields in small heaps and is removed bit by bit by bulldozers and drag harrows. Plans for the building of manure storage areas, shops and composting platforms are not being carried out. A significant portion of organic fertilizers is applied during the winter.

There is still a shortage of heavy bulldozers and excavators for organizing the preparation of compost. Special equipment is needed for composting shops.

We must seriously deal with the question of the place of organic-fertilizer application within the crop rotation; often organic fertilizers are applied on the same field year after year. Our opinion is that organic fertilizers should be applied to fallow fields and above all as part of comprehensive

agrochemical cultivation. It must be another field on which organic fertilizers must and can be applied and plowed under during the summer-fall period.

The system of accounts for work with organic fertilizers also requires improvement. In our opinion it is essential to develop scaling coefficients and introduce them into practice, and to keep accounts of organic fertilizers in physical weight and on a representative scale. Moreover, the translation into "standard manure" should be done once or twice per year.

In our opinion, such coefficients should be developed by the All-Union Scientific Research and Planning-Technological Institute for Organic Fertilizers and Peat.

Agricultural workers need more improved technologies for preparing, shipping and applying organic fertilizers. It is time to go beyond experimentation as regards the intra-soil application of liquid organic fertilizers. Many other questions related to improving work with organic fertilizers require a solution.

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FORESTRY AND TIMBER

BUSYGIN ON NEED FOR TECHNICAL ADVANCE IN TIMBER INDUSTRY

Moscow LESNAYA PROMYSHLENNOST in Russian 13 Aug 85 p 1

[Article by M. Busygin, minister of the USSR Timber, Pulp and Paper and Woodworking Industry: "Technical Progress--Decisive Directions"]

[Text] At the June meeting of the CPSU Central Committee dealing with questions of accelerated scientific-technical progress it was stated that today each person is obliged to respond seriously to the party's call--to achieve a decisive turnaround toward intensive socio-economic development. For this purpose it is important, above all, to avoid being a passive observer awaiting directives from above concerning what to do and how to do it and to demonstrate creative initiative, the ability to conceptualize, to generate ideas and to consistently strive for the implementation of these directives.

Having now placed accelerated scientific-technical progress at the head of its economic policy, the party emphasizes that this is an all-encompassing, global process. The process encompasses all aspects of economic activities and requires thorough qualitative changes in the system of planning and management, in the structure of capital investments and of production output, in technical reequipping, in the development of science and in the training and education of cadres.

This type of principled formulation of the question requires a serious restructuring of our entire apparatus. Moreover, as emphasized at a meeting of the CPSU Central Committee, we cannot tarry for any reason as regards these problems; we cannot wait it out, for there is no time to vacillate.

All of these requirements apply in full measure to the timber complex. After all, since the late 1970's the growth pace of production of timber and paper products began to lag considerably behind growth in the needs of the national economy.

We feel that this is the result primarily of a weakening in attention to the development of our raw-materials shop--the timber procurement shop. As a result, during the current five-year plan there was an underproduction of over 90 million cubic meters of commercial timber as compared to the plan. We cannot acquiesce to such a situation any longer.

As noted at the June meeting of the CPSU Central Committee, the task of production intensification requires, first and foremost, a restructuring of investment and structural policies. Moreover, most attention should be concentrated in three directions--in the directions of changing the emphasis of all economic work from new building to technical reequipping, from increasing the volume of production and consumption of raw materials and energy to the conservation of resources, and from a mechanical increase in commercial mass to improving production quality.

How can we characterize the development of the branches of the timber complex in the course of the last 10 years? In comparison to 1975, fixed industrial-production capital increased by almost 10 billion rubles. At the same time, commercial production increased by only 4.3 billion rubles. As a result, the output-capital ratio decreased significantly.

The picture is even worse within the timber procurement industry, where with a growth in capital-labor ratio of 38 percent a drop of 4.1 percent was tolerated in the production of commercial product.

With a 71-percent growth in fixed capital over two five-year plans, labor productivity increased by 58 percent (for commercial products), but overall yield at timber procurement sites increased by only 6.5 percent. The profitability of production for the main types of products fell sharply. For timber shipments it fell to 4.9 percent in 1984 as compared to 8 percent in 1982.

By looking at these figures our shortcomings, unjustified decisions and biases are evident.

Judge for yourselves. In the plan for capital investments for 1985 the proportion of expenditures for renovation and technical reequipping equals only 25 percent. As a result, the renewal of fixed production capital is proceeding extremely slowly. In 4 years of the current five-year plan the introduction of new capital, including working machines and equipment, has exceeded the removal of obsolete capital by a factor of 3. New work places are multiplying and the means of production are aging inexorably.

It is natural that under such conditions the sphere of repairs expands excessively. During the last 5 years 3.3 billion rubles have been directed at capital repair of fixed industrial-production capital, including for capital repairs of machines and equipment--1.8 billion rubles.

This is not surprising since within our fleet of machines and equipment one-third of tractors have been working over 5 years, 200 of our 440 paper- and cardboard-making machines--for over 45 years, and almost half of all digesters with their obsolete designs--25 years and more.

At present we are striving to correct the situation. In fulfilling the decisions of the April 1985 Plenum of the CPSU Central Committee, branch headquarters have developed and are implementing measures to increase growth of capacities by means of renovation and technical reequipping; it has also been decided to stop work on 34 excessively expensive structures.

It would seem that no one would be forced to agitate for the new. Its advantages are evident to everyone. For example, during 15 years of work to renovate and technically reequip, capacities for the production of splint-slab panels without increasing area and the number of workers reached 2.7 million cubic meters and today comprises about 40 percent of total plant capacities. We would have needed 480 million rubles to create such production facilities by means of new construction, whereas actual expenditures were almost four times smaller! As a result of these measures, labor productivity increased by a factor of 1.5 and labor expenditures decreased.

We must attentively examine the situation regarding objects under construction as quickly as possible and make a clear decision about where to continue and strengthen building, where to delay it and where to stop work altogether.

In speaking about the restructuring of work we must also mention that one of the main directions for our efforts today should be the improvement and technical reequipping of the repair base. As of yet the situation in this area is extremely unsatisfactory. The level of use of repair capacities in Soyuzlesremmash [All-union association for machinery of the timber trade] is 85 percent, including for the repair of motors--72.5 percent and of tractors--91 percent. Progressive unit repairs comprise only 4 percent within the general structure. The repair-service base is poor in timber-industry enterprises, and supplies of garage and repair equipment and so forth are small. The same can be said about enterprises of the pulp and paper industry as well as of other subdivisions.

We no longer intend to acquiesce to this situation.

The second important part of the question of implementing a transition of the industry toward intensification, as we have already said, lies in the sphere of improving structural policies.

Changes must occur within some of our subdivisions as concerns improvements in both the structure of raw-materials consumption as well as of products being produced.

We have at our disposal numerous reserves for economy. One we must mention is a proposal to additionally increase the production of industrial-grade wood chips for the TsBP [Pulp and Paper Industry] from timber waste products and low-quality wood at a rate of 1.5 million cubic meters. Of this amount, 1 million could be used by pulp and paper enterprises in the European Urals zone under conditions of changing production technology and structure of semi-finished grainy wood products.

A curtailment in the delivery of wood in the form of trimmed logs via the Volga-Kama freight traffic line will enable us to load timber-sawing capacities and to obtain industrial-grade wood chips for the TsBP from the waste products of timber sawing and crosscutting of trimmed logs in the lower storehouses of timber-industry enterprises. The possible volume of deliveries of industrial-grade wood chips to Solikamskiy TsBK [Pulp and Paper Combine] will equal 540,000 cubic meters annually for the purpose of manufacturing

thermomechanical mass. This is possible as a result of planned technical reequipping and expansion of facilities.

Another important direction in the conservation of resources involves the extensive use of waste products from secondary wood raw materials. This was the subject of serious and business-like discussions in Rostov at a recent all-union seminar devoted to the introduction of the work experience, approved by the CPSU Central Committee, of the associations Yugmebel [Southern Furniture Association], Tsentrromebel [Central Furniture Association] and KievDrev [Kiev Lumber Association], which was approved by the CPSU Central Committee.

I especially wish to mention decreasing the density of products. The effect of this may be evaluated using the example of the pulp and paper industry. Its restructuring to produce "lighter" products enabled it at the beginning of the five-year plan to decrease the density of a square meter of printing types of paper by 6-9 percent, and of cardboard--by 2.2 percent. By means of this alone they saved 4.8 million cubic meters of wood, 85,000 tons of chemicals, 4.7 million gigacalories of heat and one billion kilowatt-hours of electrical energy.

However, the transition to resource-sparing technology is being implemented slowly. This is true not only in the pulp and paper industry but in the production of splint-slab panels as well.

We must take the path toward further decreasing the thickness of the panel to 10-14 millimeters. Here the question will depend on consumers, primarily furniture makers. It is they who will have to deal with the problem of utilizing thin panels in furniture construction, who will have to develop fittings and dependable methods of building and reinforcing furniture.

No less urgent is the question of decreasing the density of plywood. Last year its average thickness equalled 6.09 millimeters, whereas in Soyuzfanspichprom [All-union plywood and match industry association] it equalled 5.94 millimeters. As we can see, here we have considerable potential for economizing on raw materials.

The struggle to decrease density of products in the packaging industry is being carried out unsatisfactorily. In 1 year the industry uses about 10 million cubic meters of raw materials. In addition, the shortage of packaging grew significantly in connection with the needs of the agro-industrial complex. A 9-10 millimeter slab still continues to be used although for a long time now a planed or stripped sheet of veneer has been "requested."

In discussing economizing on raw materials we cannot fail to direct our attention at the thickness of saws. Today a mill saw may be as much as 2.8 millimeters thick, and in the production of packaging it is even thicker. For this reason we turn millions of cubic meters of timber into sawdust. It is time to do away with this type of wastefulness.

In the struggle to economize on raw materials during the coming five-year plan emphasis must be placed on the production of cardboard packaging.

Here is a word about the scientific-technical potential of our branches. Today we have 32 scientific-research institutes and affiliates, 19 NPO's [Scientific-Production Associations], 27 planning institutes, 42 technological design buros and 17 branch laboratories in higher education institutions with a total of 24,000 scientific workers and ITR [Engineering and technical personnel]. Among them are 1,180 doctors and candidates of science.

As we can see, this is an impressive force. Still, the return on science does not meet the needs of the times. We must decisively turn science toward the needs of production and towards its having a more effective influence on improving technical-economic work indicators. Current forms do not meet the requirements for fulfilling the goal of reorienting industry toward an intensive path of development. Suffice it to say that up to 500,000 persons, including about 200,000 women, are involved in manual labor. This is an intolerable situation.

One of the questions is: Why are we at an impasse as regards the development of narrow-gauge transport? The TsNIIME [Central Scientific Research Institute of Mechanization and Power Engineering in the Lumber Industry], Giprolestrans [State Institute for the Planning of Logging, Rafting and Woodworking Establishments and Lumber Transportation] and the technical administration can be blamed for this. Also, from the technical point of view the building of roads that can be used on a year-round basis is very unsatisfactory.

Technical policies in the area of timber rafting are not being carried out any better. We have practically lost rafting machine building. It is not surprising that the labor intensity of rafting operations increased last year as compared to 1980 and that the number of workers carrying out fully-mechanized operation decreased.

And what about TsNIIlesosplav [Central Scientific Research Institute of Log Rafting]? We created commissions to investigate its activities and examined its accounts. The situation does not change. Here we must take more energetic measures to correct the situation that has developed.

Recently the ministry was subject to serious and to a large degree justified criticism in the press for the condition that exist in the pulp and paper industry. The slow pace of introducing progressive technological processes and the difficulties related to this as concerns the raw-materials structure of the branch, the unsatisfactory quality of production, deficiencies in the development of an industry that conserves timber and many other problems are to a large extent the result of the low effectiveness of branch science. A narrow, armchair, bench testing style of work on the part of our leading scientific centers--VNPObumprom [All-Union Scientific Research Institute of the Pulp and Paper Industry] (Comrade Ivanov) and UkrNPObumprom [Ukrainian Scientific Production Association of the Pulp and Paper Industry] (Comrade Gritsulyak)--this is what decreases their performance.

One thing is clear--today the trends and work quality in our research, planning and design-technological organizations do not correspond to the needs and dictates of the meeting in the CPSU Central Committee on questions of

scientific-technical progress. We feel that in reexamining the structure of the NPO and in creating new NPO's it will be correct to include the following in them: planning and installation-adjustment subdivisions, machine-building plants and enterprises and testing sites as well as branch laboratories of higher educational institutions. We should also study the possibility of organizing the NPO on the basis of large industrial complexes such as the Bratskiy LPK [Lumber Producers' Cooperative].

And how is existing technology being utilized?

The indicators for use of equipment do not improve from one year to the next, and in some cases they are dropping. Thus, the coefficient for the use of LP-49 rolling-skidding machines equals 0.33; the productivity per machine-shift dropped by 12 percent as compared to 1981, and annual output dropped by 700 cubic meters. Here, in the course of 227 calendar days during which the average machine was in good condition it operated only 112 shifts. The LP-19 rolling machine's use was not much better.

Yet we have the wonderful experience of P. V. Popov. His brigade's annual output with the LP-19 was five times higher than the average throughout Tyumenlesprom [Tyumen Timber Industry Association] and six times higher than that of Krasnoyarsklesprom [Krasnoyarsk Timber Industry Association]. Unfortunately, many association directors still have not drawn the proper conclusion from this. Within the branch we have many skilful machine operators who know and love their work. All we have to do is support them and help them organize their work.

We have other problems in our management mechanism. For example, how do we decrease the statistical operations information that is collected from enterprises and stored in our GVTs [Main Computer Center]? Last year several positive changes were noted here--statistical information was decreased by 110 indicators. Nevertheless, the system continues to be very cumbersome. Suffice it to say that within the automated system of branch management there are now 592 indicators used in statistical operations reports, including 92 daily indicators. This kind of "intellectual curiosity" tears large numbers of engineering-technical workers away from their immediate responsibilities related to production management. This must be decisively done away with; it is essential to force the introduction of modern office machinery and modern means of information.

Decisive conditions for a sharp turn towards production intensification include the eradication of obsolete concepts and methods of work, the psychological reeducation of cadres from top to bottom, and the concentration of their efforts on accelerating scientific-technical progress. This is all the more important because during the first 6 months the ministry's industry operated unsatisfactorily. According to the absolute majority of indicators the plan was not only not fulfilled, it will not even reach the production levels for the same period last year.

The main reason for this type of situation is the low level of production organization, which is attested to by the fact that about 20 percent of brigades still do not fulfill their plan goals. In associations such as

Permlesprom [Perm Timber Industry Association], Tomlesprom [Tomsk Timber Industry Association], Soyuzbumizdeliya [All-Union Association of Paper Products] and Vostokmebel [Eastern Furniture Association] almost every third brigade does not fulfill its plans.

This situation must be corrected. The most extreme measures must be taken to bring order and discipline locally. The directors of production works, main administrations and associations must analyze the reasons for work stoppages within each association in the shortest possible time and correct the situation.

The workers of the timber industry have joined the labor watch under the banner, "27 10-Day Periods of Shock Work for the 27th CPSU Congress." As the results for July show, positive changes have occurred. Plans dealing with the delivery and crosscutting of lumber and with the production of pulp, paper, cartons, wooden panels, crossties, articles for cultural-everyday purposes, including furniture, and other products have been fulfilled.

It is important not only to secure the results that have been achieved but also to develop them and to take all measures to make up for the lags that have been tolerated in order to fulfill the plan for the final year of the five-year plan. There is no time for vacillating. It is a matter of honor to complete 1985 and the five-year plan as a whole with dignity and to create a foundation for well-paced work in the future.

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